DOCUMENT RESUME

ED 202 525 JC 810 293

AUTHOR	Henn, Lisa; And Others
TITLE	Health Instruction Packages: Consumer--Nutrition and Health.
INSTITUTION	League for Innovation in the Community Coll., Los Angeles, Calif.
SPONS AGENCY	Kellogg Foundation, Battle Creek, Mich.
PUB DATE	76
NOTE	166p.
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Adult Education; Allied Health Occupations Education; *Body Weight; Consumer Education; *Dietetics; Dietitians; *Food; Foods Instruction; Hypertension; Learning Modules; Meat; Nursing Education; *Nutrition; Nutrition Instruction; Obesity; Older Adults; Two Year Colleges
IDENTIFIERS	Caffeine; Diet Therapy; Fiber (Food); *Health Instruction Exchange; Menu Planning

ABSTRACT

These eight learning modules provide text, illustrations, and exercises on a variety of nutritional and dietetic topics. The first two modules were prepared by Lisa Henn to instruct older adults in the various food sources of caffeine and fiber and in the harmful effects of caffeine and the dietetic importance of fiber. The third module was designed by Penny Donne to familiarize health care workers with methods and associated problems of weight reduction. The fourth and fifth modules were prepared by Carolyn H. Gustafson. One is addressed to dietetic assistants and the general public and describes how to determine the amount of uncooked meat needed for three-ounce individual portions. The other provides hospital dietitians with a method for modifying recipes to yield a varying number of servings. The sixth module, by Lee Weller Callaway, teaches dietetic technicians and other interested persons about the fundamental components of regular, soft, full-liquid, and clear-liquid diets. The seventh module was designed by Evelyn S. Burgess to instruct nurses and dietetic assistants in the components of low-sodium diets prescribed for hypertension. The eight module, by Minda S. Graff, teaches nurses and nurse's aides to plan one-day menus for patients on a 0.5 gram sodium-restricted diet. Each module provides sequential reinforcement exercises with immediate feedback and a post-test with answers. (JP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED202525

HEALTH INSTRUCTION PACKAGES:

CONSUMER -- NUTRITION AND HEALTH

Modules prepared by:

Lisa Henn
Penny Donne
Carolyn H. Gustafson, R.D
Lee Weller Callaway, R.D., Ph.D.
Evelyn S. Burgess, R.D.
Minda S. Graff

HEALTH INSTRUCTION EXCHANGE

A Project of the League for Innovation in the Community College

JC 810 299

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert Leo

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

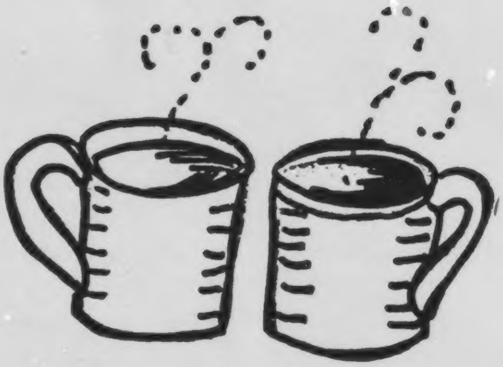
HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

CAFFEINE

by

Lisa Henn

Illustrated by Lauren Richardson



© Lisa Henn, 1977
All Rights Reserved

7-4

TITLE OF PACKAGE: Caffeine

AUTHOR: Lisa Henn

INSTITUTION: Lane Community College, Eugene, Ore.

INTENDED STUDENT: Elderly or Older Adults

ESTIMATED WORKING TIME: 30 minutes

MATERIALS NEEDED: None

REVISED: Nov. 15, 1977

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue ☐ Westwood Center ☐ Suite 925 ☐ Los Angeles, CA 90024 ☐ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

The purpose of this package is to give you facts about caffeine. You will learn about the foods and drugs that contain caffeine, the general effects that caffeine has on the body, and some health problems associated with caffeine consumption. You may want to use some of the practice questions in this package when you make a nutrition presentation on caffeine.

After you have completed this package, please fill out the Comments and Feedback sheet at the end and return it to Lisa Henn. Do not put your name on the sheet.

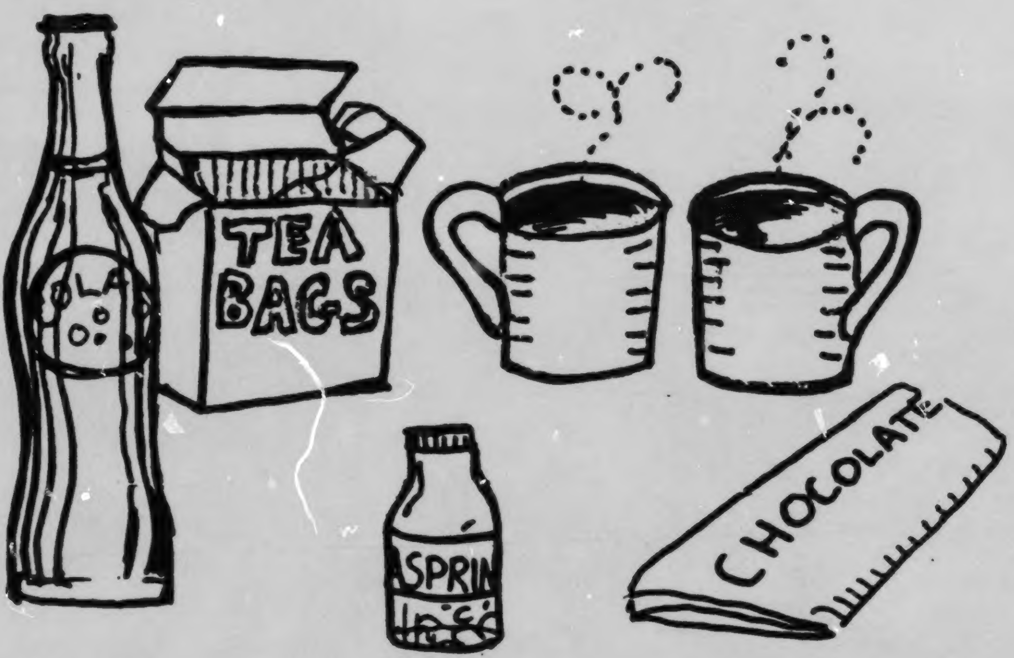
OBJECTIVES

After completing this package, you will be able to:

1. Name the three foods in which caffeine occurs naturally and the two products which contain caffeine as an additive.
2. List the four major effects caffeine has on your body.
3. Tell how many cups of coffee per day you must consume in order to be considered a high caffeine user.
4. Explain the difference between regular and decaffeinated coffee and coffee substitutes.
5. List two health problems associated with caffeine consumption.
6. Name three foods containing caffeine which children should avoid.
7. List 7 out of 14 possible adverse reactions associated with the consumption of caffeine.
8. Name a major health problem where high caffeine consumption should be avoided.
9. Name four problems habitual caffeine users may experience.
10. List three foods which could be eliminated from the diet when attempting to relieve insomnia.

CAFFEINE

Caffeine occurs naturally in coffee, tea and chocolate. It is added to aspirin and cola beverages. Caffeine is added to aspirin because it seems to be somewhat more effective for relieving headaches than aspirin alone, although there is disagreement on this point.



Practice Question #1:

A. Caffeine occurs naturally in what three foods?

1)

2)

3)

B. Fill in the blanks. Caffeine is added to ________________ because it may be somewhat effective for relieving headaches. Caffeine is also added to ____________ beverages.

Answer:

A. 1) Coffee
   2) Cocoa
   3) Tea

B. Aspirin and cola

Coffee alone has no food value. However, the caffeine in coffee acts as a stimulant which masks fatigue, stimulates kidney activity, and raises the blood pressure and the body's metabolic rate.

Practice Question #2:

Circle four major effects that caffeine has on the body:

A. Raises the metabolic rate

B. Acts as a tranquilizer

C. Masks fatigue

D. Raises the blood pressure

E. Stimulates appetite

F. Stimulates kidney activity

Answers:

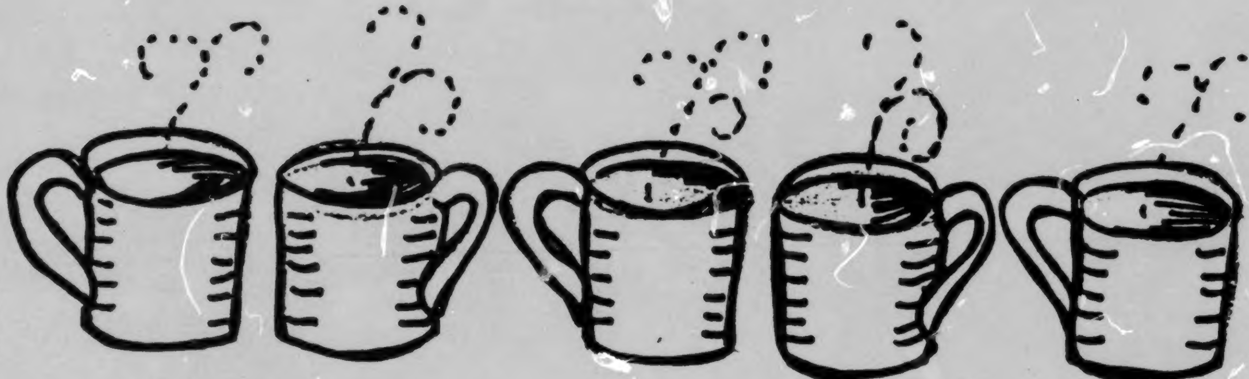
A. Raises the metabolic rate

C. Masks fatigue

D. Raises the blood pressure

F. Stimulates kidney activity

The amount of caffeine in a cup of coffee depends on the strength of the brew. Usually there are 100 milligrams of caffeine per cup of strong coffee. This is true for both ground and instant coffees. A person who drinks more than five cups of coffee per day is considered a high caffeine user.



Practice Question #3:

Fill in the blank. A person who drinks more then ______ cups of coffee per day is considered a high user of caffeine.

Answer:

5 cups

Decaffeinated coffee has about 95% of the caffeine removed and therefore has lost the stimulating properties of caffeine. Coffee substitutes, such as roasted cereal grains, contain no caffeine.

Practice Question #4:

True or False:

Coffee substitutes and decaffeinated coffees provide the same stimulating effect as regular coffee even though they contain little or no caffeine.

Answer:

False. Decaffeinated coffees and coffee substitutes do not have the stimulating properties of coffee that contains caffeine.

Caffeine stimulates the secretion of gastric (stomach) acid and thus may make an individual susceptible to peptic ulcer. Drinking coffee may increase the risk of developing peptic ulcer. The coffee oils can also irritate the intestines and cause diarrhea.

Caffeine has been found to cause chromosome breakage. This means that caffeine consumption can cause birth defects in humans, although the chances of this are assumed to be very small unless extremely high levels of caffeine are consumed daily.

Practice Question #5:

Circle two health problems associated with caffeine consumption:

A. Stomach cancer

B. Peptic Ulcer

C. Tuberculosis

D. Chromosome breakage and birth defects

Answers:

B. Peptic Ulcer

D. Chromosome breakage and birth defects

Cola drinks contain 35-55 milligrams of caffeine as an additive. There is some concern that the caffeine in cola drinks may have an effect on brain growth in children. Chocolate bars can contain as much as 25 milligrams of caffeine. Since children are more susceptible than adults to the toxic effects of caffeine, it is recommended that they not consume coffee, tea or cocoa. Overindulgence can lead to a condition of chronic caffeine poisoning.

Practice Question #6:

Name at least three foods containing caffeine which children should avoid:

1)

2)

3)

Answer:

Children should not consume:

1) Coffee

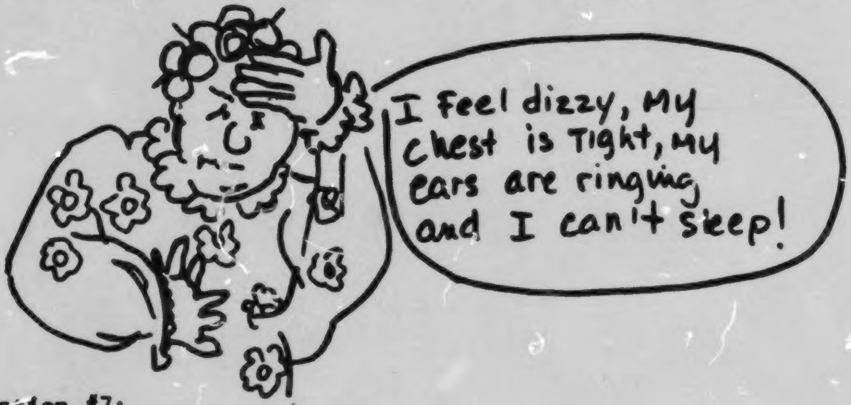
2) Tea

3) Large amounts of cocoa

They should probably not consume large amounts of cola beverages either.

Tea, which consists of the leaves and flowers of th tea bush, contains about the same amount of caffeine as coffee. However, most teas are brewed in such a way that the amount of caffeine extracted is less than that in a comparable amount of coffee. Tea also contains tannin, which can be constipating.

There are a number of possible adverse reactions associated with the consumption of caffeine, including vomiting, stomach pain, ringing in the ears, tightness in the chest, heart palpitations, insomnia (sleeplessness), general depression, constricted pupils, narrowed field of vision and dizziness.


I feel dizzy, my chest is tight, my ears are ringing, and I can't sleep!

Practice Question #7:

Which of the following are possible adverse reactions associated with caffeine consumption?

A. Vomiting
B. Stomach Pain
C. Gas
D. Ringing in the Ears
E. Rash
F. Heart Palpitations
G. Insomnia
H. Anxiety
I. General Depression
J. Delirium
K. Constricted Pupils
L. Dizziness

Answers:

A. Vomiting

B. Stomach Pain

D. Ringing in the Ears

F. Heart Palpitations

G. Insomnia

H. Anxiety

I. General Depression

K. Constricted Pupils

L. Dizziness

Heavy caffeine users sometimes experience decreased alertness, fatigue and nervousness. Heavy caffeine users can also experience severe headaches if they stop using caffeine. It is dangerous for persons with heart disease to consume large amounts of caffeine.

Practice Question #8A:

Circle four problems heavy caffeine users may experience:

A. Decreased Alertness

B. Fatigue

C Sore Throat

D. Severe Headaches

E. Dry Mouth

F. Nervousness

Answers:

A. Decreased Alertness

B. Fatigue

D. Severe Headaches

F. Nervousness

Practice Question #8B:

Fill in the blank. It is dangerous for persons with ______________________ disease to consume large amounts of caffeine.

Answer:

It is dangerous for persons with HEART Disease to consume large amounts of caffeine.

People who habitually consume caffeine in any form can become psychologically dependent upon it. They may also develop a tolerance to its effects, which means they must increase the caffeine dosage to achieve the desired result.

If you suffer from any of the symptoms associated with caffeine consumption, especially insomnia, you might try reducing the amount of coffee, tea and cocoa in your diet.

Practice Question #9:

Fill in the blanks. People suffering from insomnia (sleeplessness), should try reducing the amount of ________________, ____________________, and ______________________ in their diet.

Answers:

People suffering from insomnia (sleeplessness), should try reducing the amount of __COFFEE________, ____TEA________, and ___COCOA_____________ in their diet.

You've learned a great deal about caffeine. Test your memory with the brief Post-Test on the following page. The answers are on Page 14.

POST TEST

1. Choose the correct answers. Caffeine occurs naturally in which three foods? Which two products contain caffeine as an additive?

A. Milk	E. Cocoa
B. Coffee	F. Antibiotics
C. Orange Juice	G. Cola Drinks
D. Tea	H. Aspirin

2. Fill in the blanks. Caffeine has four major effects on the body. It masks f______________, raises the body's b______________ pressure and metabolic r____________, and s______________ kidney activity.

3. How many cups of coffee per day must you drink in order to be considered a high caffeine user?

   A. 3

   B. More than 5

   C. 10

4. True or False. Coffee substitutes and decaffeinated coffees do not provide the same stimulating effects as regular coffee.

5. Choose the correct answers. Two potentially serious health problems associated with caffeine consumption are:

   A. Birth defects and chromosome breakage

   B. Gallstones

   C. Peptic ulcer

6. True or False. Children are more susceptible than adults to the toxic effects of caffeine and therefore it is recommended that children not consume coffee, tea, cocoa, or cola drinks.

7. Which of the following are possible adverse reactions associated with caffeine consumption? (Choose 7)

A. Vomiting

B. Stomach Pain

C. Ringing in the Ears

D. Rash

E. Heart Palpitations

F. Insomnia

G. Dizziness

H. Anxiety

8. True or False. It is dangerous for persons with heart disease to consume large amounts of caffeine.

9. Choose the correct answers. Heavy caffeine users may experience severe ____________________ if they stop using caffeine. They also sometimes experience decreased ________________________.

A. Alertness

B. Earaches

C. Headaches

10. If you were having trouble getting to sleep at night, which three foods containing caffeine would you try to eliminate from your diet?

A. Carrots

B. Coffee

C. Milk

D. Tea

E. Cocoa

ANSWERS:

1. Coffee, Tea and Cocoa (B, D, E) Cola Drinks and aspirin (G, H).
2. Fatigue, Blood Pressure, Metabolic Rate, Stimulates kidney activity
3. B
4. True
5. A and C
6. True
7. A, B, C, E, F, G, H
8. True
9. C--Headaches A--Alertness
10. B, D, E

COMMENTS AND FEEDBACK

Now it's your turn to have some input.

1. Were there any parts of this package which were particularly difficult or confusing?

2. Was the package useful to you?

3. Any other comments?

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

FIBER

By

Lisa Henn

© Lisa Henn, 1976
All Rights Reserved

TITLE OF PACKAGE:	Fiber
AUTHOR:	Lisa Henn
INSTITUTION:	Lane County Senior Services, Eugene, Ore.
INTENDED STUDENTS:	Elderly persons; nutrition site managers
ESTIMATED WORKING TIME:	25 minutes
MATERIALS NEEDED:	None
REVISED:	Nov. 1, 1977

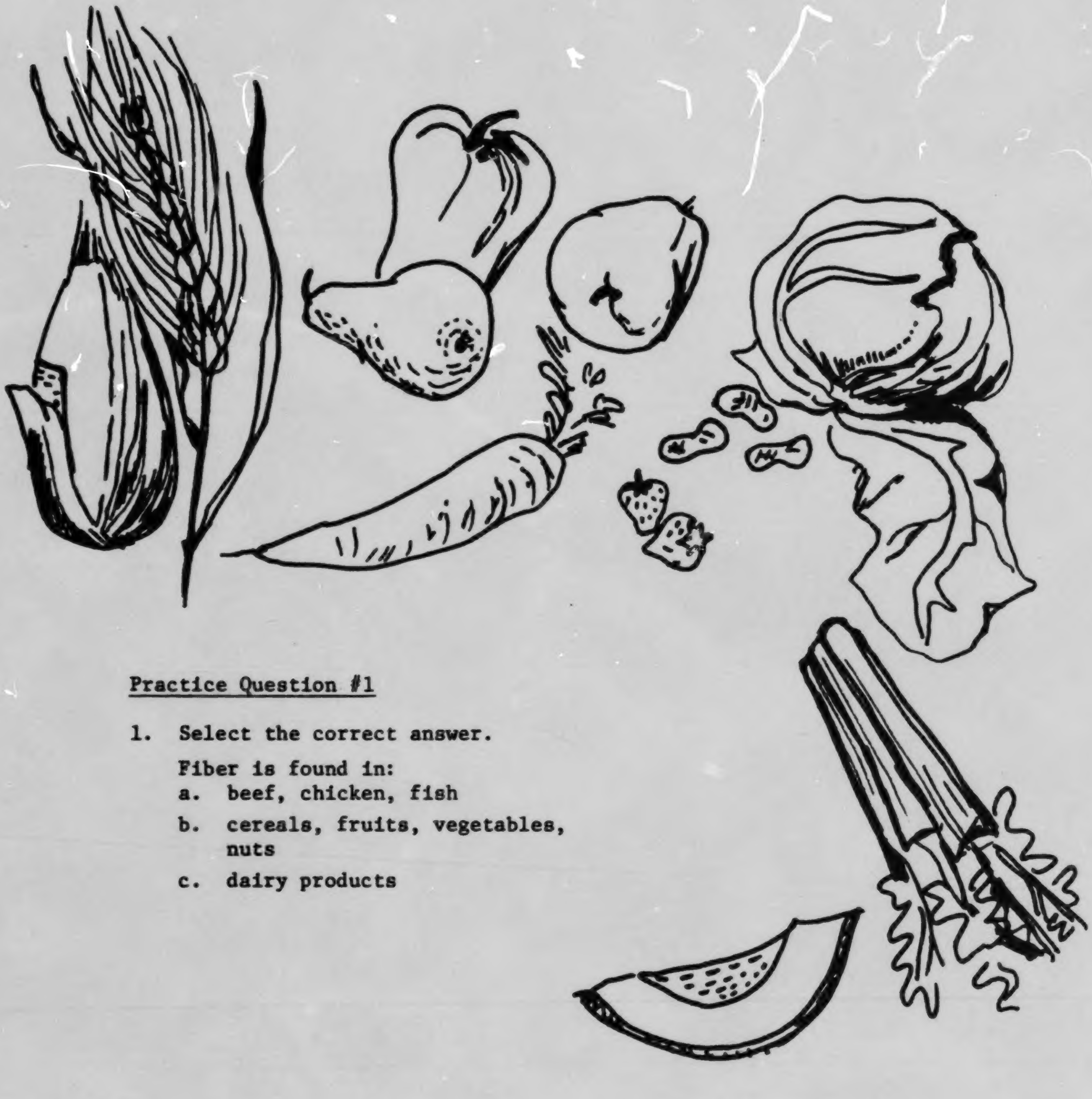
HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue ☐ Westwood Center ☐ Suite 925 ☐ Los Angeles, CA 90024 ☐ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

The purpose of this package is to teach you about the importance of including enough fiber in your diet. As you work through the unit, you will tell what fiber is, what part of your diet provides it, and how it affects your body.

You will learn about, and explain as you would to a friend, the common health problems that a lack of dietary fiber can cause. You will be able to tell the symptoms of diverticular disease, to tell how eating bran might prevent bowel cancer, and to list seven factors that can be involved in the development of constipation.

You will also identify the foods with a high fiber content. If you're not eating enough high fiber foods, you may decide at the end of this unit that you should change your diet for better health.

Fiber is the portion of the diet that is non-digestible. Fiber provides no nutrients to the body. Major sources of fiber include whole grain cereals, fruits, vegetables and nuts. Processing, such as peeling or cooking, reduces the amount of available fiber.



Practice Question #1

1. Select the correct answer.

   Fiber is found in:
   a. beef, chicken, fish
   b. cereals, fruits, vegetables, nuts
   c. dairy products

Check your answer on the next page.

Answer

B is the correct choice. Fiber is found in whole grain cereals, fruits, vegetables and nuts. It is the non-digestible part of the diet.

The addition of fiber to the diet adds bulk, aids in water retention and stimulates the movement of digested food through the intestine.

EVERY BODY NEEDS FIBER

Practice Question #2

Choose the correct answer.

Food fiber adds bulk to the diet and helps the body to retain water. Fiber also:

a. provides protein

b. supplies energy

c. stimulates the movement of digested food through the intestine

d. stimulates the heartbeat and raises the body's blood pressure

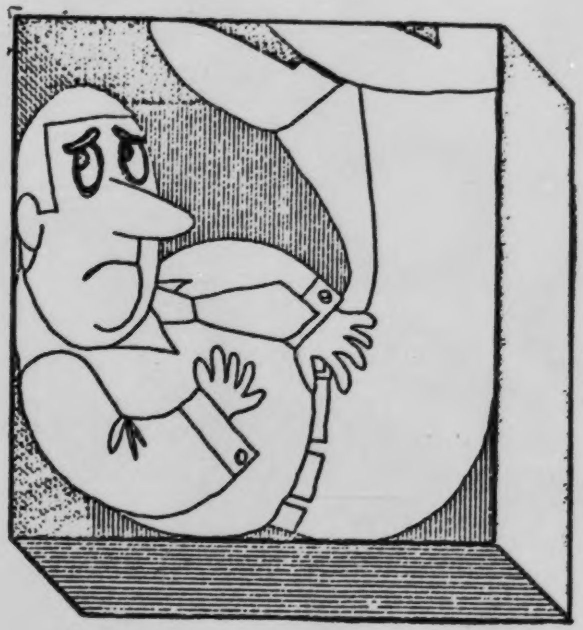
---

Answer

C is the correct answer. Fiber stimulates the movement of digested food through the intestine.

Lack of fiber in the diet plus the increased consumption of fat, sugar, and meat may play a role directly or indirectly in the development of the following health conditions: appendicitis, hiatal hernia, bowel cancer, gallstones, constipation, hemorrhoids, varicose veins, diabetes overweight, dental decay, and diverticular (pronounced dye-ver-tic-you-lar) disease.

Where Does It Go?



Practice Question #3

Of the conditions listed below, which ones might be associated with a lack of fiber in the diet?

1) appendicitis
2) hiatal hernia
3) strep throat
4) bowel cancer
5) gallstones
6) constipation
7) hemorrhoids
8) sinus infections
9) varicose veins
10) atherosclerosis
11) diabetes
12) arthritis
13) overweight
14) dental decay
15) diverticular disease

Answer.

The conditions of appendicitis, hiatal hernia, bowel cancer, gallstones, constipation, hemorrhoids, varicose veins, atherosclerosis, diabetes, overweight, dental decay, and diverticular disease might be associated with a lack of fiber accompanied by a high consumption of fat, sugar and meat in the diet.

Bran, which is wheat fiber, inhibits bacterial action on bile salts. Some scientists believe bran may prevent the formation of cancer-causing agents (carcinogens) in the large intestine, especially with a reduction of the fat, meat, and sugar content of the diet.

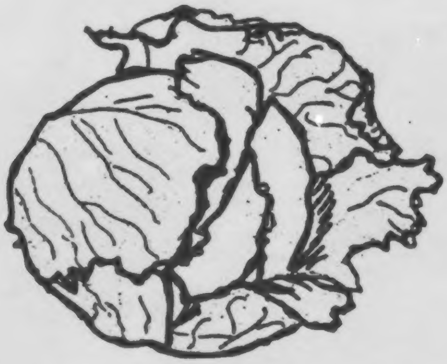
Practice Question #4

True or False: Wheat fiber (bran) may be useful for the prevention of bowel cancer because it inhibits bacterial action on bile salts.

Answer

True. Bran may be useful for the prevention of bowel cancer because it inhibits bacterial action on bile salts.

Eating patterns in the United States have changed during the 20th century. There has been a decrease in the consumption of whole wheat flour, cereal fiber, fresh fruits and fresh vegetables. There has been an increase in the use of processed fruits and vegetables as well as processed and refined breads and cereals. It is thought that this change in eating habits is responsible for the widespread incidence of diverticular disease.



Practice Question #5

Choose two reasons why diverticular disease has become a health problem

1) Increased consumption of whole wheat flour.
2) Increased use of processed fruits and vegetables.
3) Decreased consumption of cereal fiber, fresh fruits, and vegetables.

Answer:

Numbers 2 and 3 are the correct answers. There has been a decrease in the consumption of whole wheat flour in the 20th century and an increased use of processed fruits and vegetables.

Diverticular disease was practically unknown prior to the 20th century, but is now quite common. Diverticular disease is rare in countries with a high residue/high fiber diet. Diverticula are sacs that protrude through weak spots in the muscle of the colon (lower section of the large intestine). A disease called diverticulitis (pronounced dye-ver-tic-you-light-iss) occurs when these sacs fill with food residues and become inflamed.

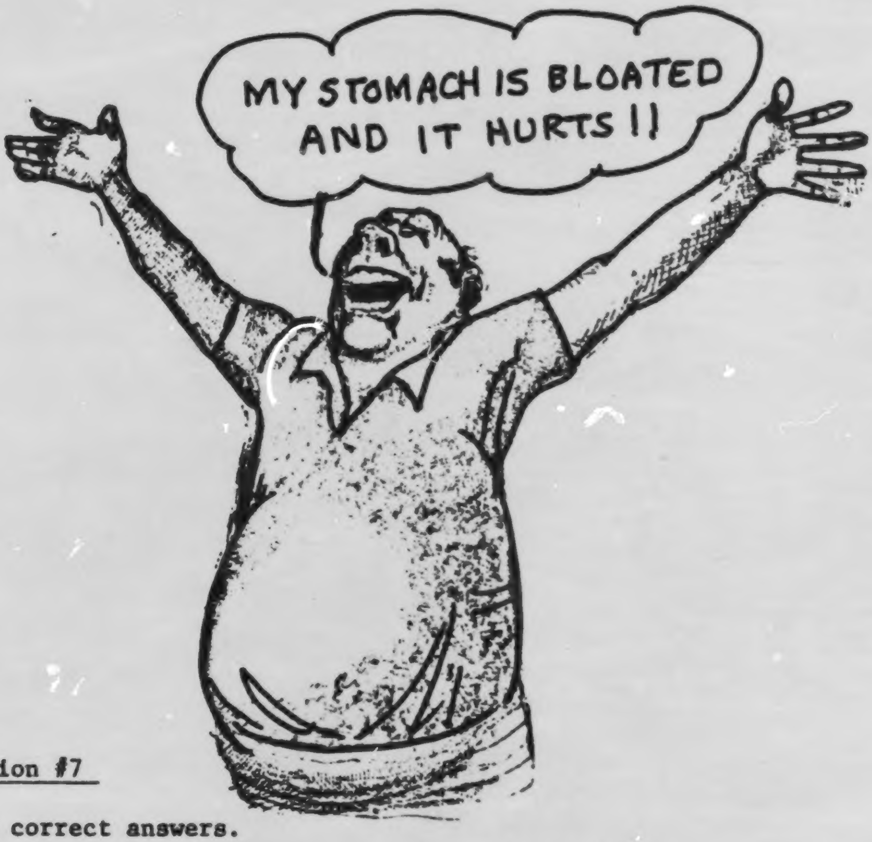
Practice Question #6

Fill in the blanks. Diverticula are s________ which protrude into the colon. When diverticula fill with food residues, they become in______________, causing d____________________.

Answer:

Diverticula are sacs which protrude into the colon. When diverticula fill with food residues, they become inflamed, causing diverticulitis.

Symptoms of diverticulitis include abdominal pain and bloating, fever and constipation. Adding fiber to the diet in the form of unprocessed bran relieves the symptoms.


MY STOMACH IS BLOATED AND IT HURTS!!

Practice Question #7

Select the correct answers.

Which of the following are symptoms of diverticulitis?

A. _______ abdominal pain

B. _______ bloating

C. _______ headache

D. _______ fever

E. _______ sore throat

F. _______ constipation

Answer

A, B, D, and F are correct. Abdominal pain, bloating, fever, and constipation are symptoms of diverticulitis.

Lack of fiber in the diet is also associated with the development of constipation or "irregularity." Lack of exercise, malnutrition, low fiber intake, nervous strain, worry, infection, and the excessive use of laxatives may be responsible for this condition. A high fiber diet of raw fruits, vegetables, and whole grain cereals is useful in the treatment of constipation. It is also thought that there is an association between "irregularity" and the development of varicose veins. Increased dietary fiber in the form of bran is a possible preventive measure.

Practice Question #8

Choose the factors which may be responsible for the development of constipation:

A. _____ infection

B. _____ lack of dietary fiber

C. _____ worry

D. _____ excessive use

E. _____ lack of exercise

F. _____ malnutrition

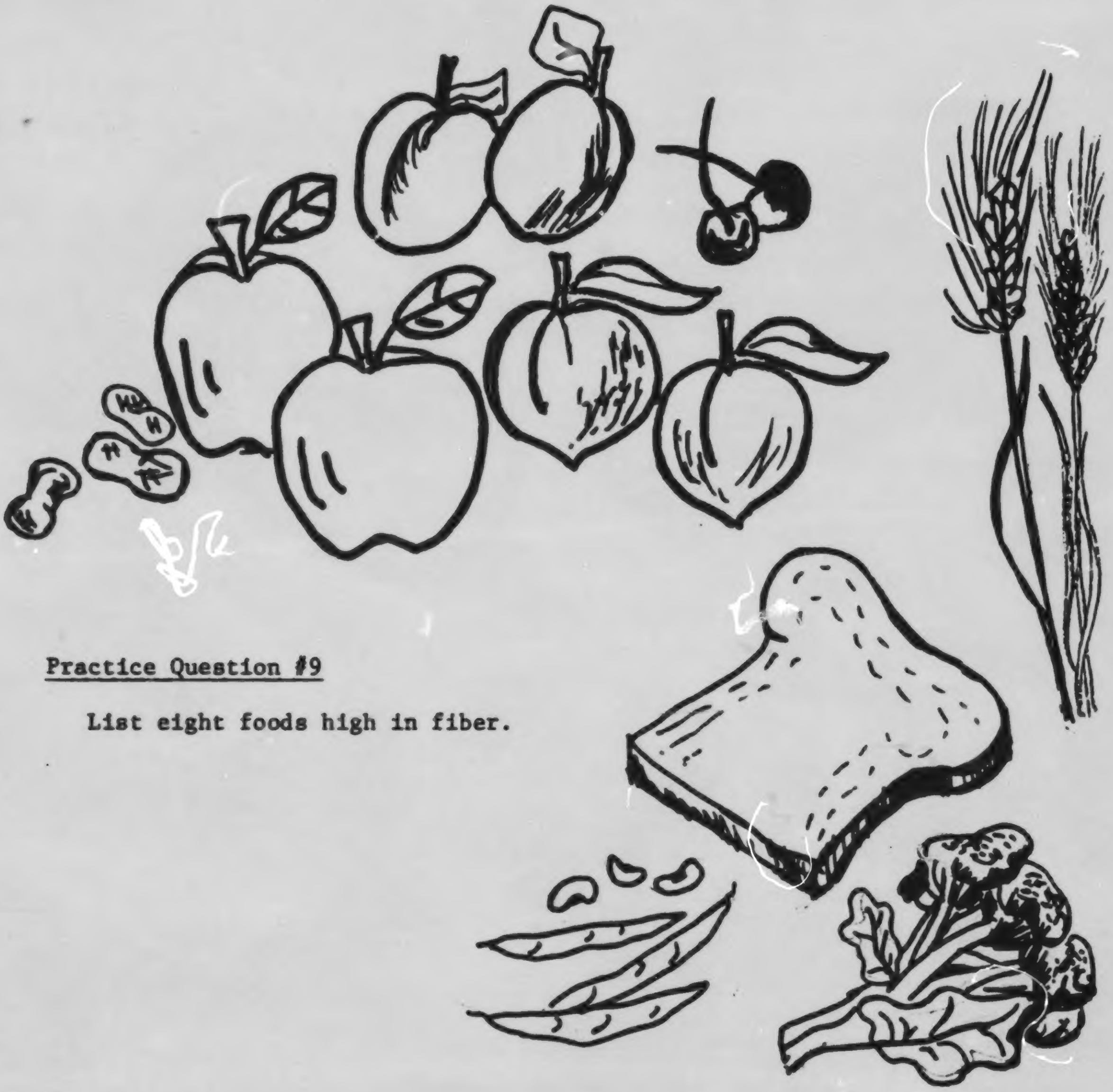
G. _____ high cheese consumption

Answer

A, B, C, D, E, and F are correct.

Infection, worry, malnutrition, lack of dietary fiber, excessive use of laxatives, and lack of exercise may be responsible for constipation.

If you wish to increase the fiber in your diet, regularly include the following foods: whole grain or bran breads and cereals; raw cherries and other raw fruits with skins; broccoli and other slightly cooked or raw vegetables; nuts and beans; dried fruits.

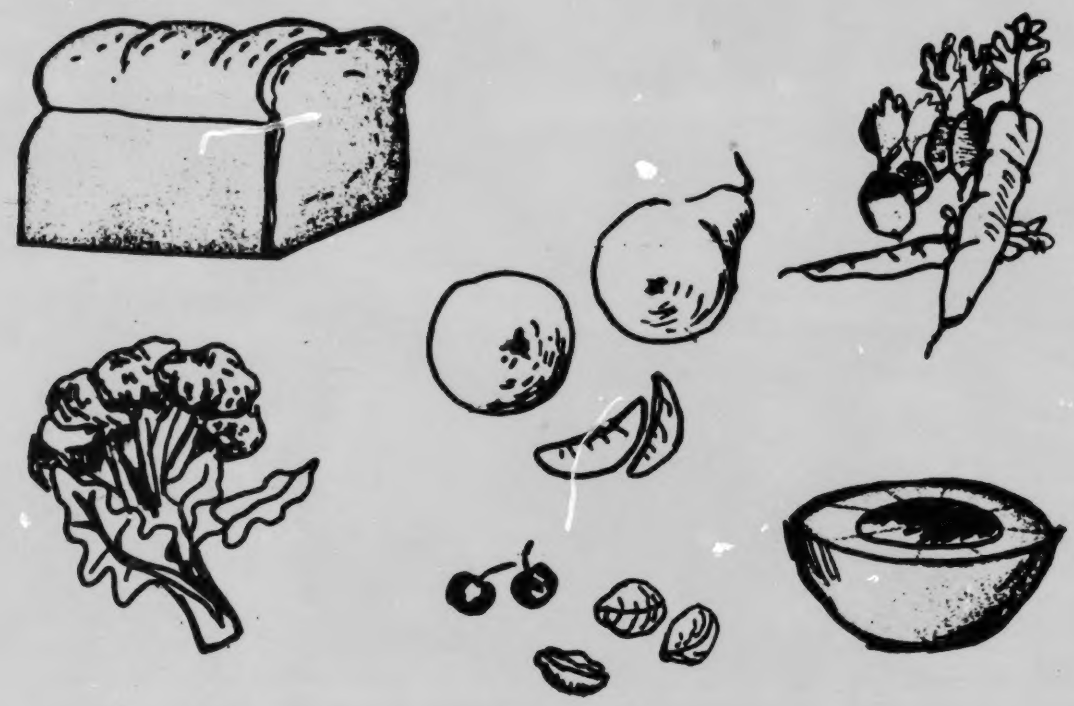


Practice Question #9

List eight foods high in fiber.

Answer

Whole wheat bread, oatmeal cereal, bran cereal, broccoli, apples, peaches, celery, pears, cherries, melons, walnuts, prunes, oranges, and beans are examples of the correct answer to this question.



Practice Question #10

List two different high fiber foods that you can eat for breakfast for one week.

Answer

Examples of high fiber foods which are good for breakfast:

- whole wheat toast
- bran cereal
- prunes and raisins
- fresh apples, peaches, pears, melon
- whole grain cooked cereals such as oatmeal
- whole wheat muffins, pancakes, waffles

POST-TEST

1. Fiber is the non-digestible portion of the diet. True False

2. Select the foods which contain fiber:
   - a. whole grain cereals
   - b. meat
   - c. fruits
   - d. vegetables
   - e. butter
   - f. nuts

3. ______________ is wheat fiber.
   - a. pasta
   - b. wheat germ
   - c. bran

4. What are the three major effects of fiber on the body?
   - a. provides nutrients
   - b. aids in water retention
   - c. adds bulk
   - d. stimulates movement of digested food

5. Choose six out of a possible 15 health problems listed below which are associated with a lack of fiber in the diet.
   - a. appendicitis
   - b. hiatal hernia
   - c. bowel cancer
   - d. strep throat
   - e. gallstones
   - f. constipation
   - g. arthritis
   - h. hemorrhoids
   - i. varicose veins
   - j. atherosclerosis
   - k. diabetes
   - l. overweight
   - m. dental decay
   - n. diverticular disease
   - o. sinus infection

6. Diverticulitis: (Choose one.)
   - a. results from a high fiber diet
   - b. involves the inflammation of sacs filled with food residues. The sacs protrude into the colon

7. Symptoms of diverticulitis include: (Choose four.)
   - a. vomiting
   - b. drowsiness
   - c. abdominal pain
   - d. constipation
   - e. bloating
   - f. fever

8. Diverticular disease has become a problem in the United States during the 20th century because people are eating less whole wheat flour, cereal fiber, fresh fruits, and vegetables.

   True False

9. It may be possible to prevent the formation of cancer-causing agents in the intestine by doing the following:

   a. adding bran to the diet
   b. reducing the fat and meat content of the diet
   c. reducing the amount of sugar in the diet
   d. all of the above

10. Which of the following can be responsible for constipation?

   a. lack of dietary fiber
   b. lack of exercise
   c. malnutrition
   d. worry and nervous strain
   e. eating cheese
   f. infection
   g. excessive use of laxatives
   h. eating meat

11. Name six high fiber foods.

12. List any foods high in fiber that you will eat for breakfast over a three-day period.

ANSWERS TO POST-TEST

1. True

2. a., c., d., f.

3. c. - bran

4. b., c., d.

5. Any six if the following: a., b., c., e., f., h., i., j., k., l., m., n.

6. b.

7. c., d., e., f.

8. True

9. d.

10. a., b., c., d., f., and g.

11. Examples:

    beans
    bran cereals
    walnuts
    whole wheat bread
    fresh pears
    fresh apples
    fresh peaches
    prunes
    oranges
    celery
    fresh melons
    broccoli

12. Example:

Day 1	Day 2	Day 3
whole wheat toast	whole wheat pancakes	oatmeal or bran cereal
prunes	melon	orange sections

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411

A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

WEIGHT CONTROL: THE FAT OF THE LAND

by

Penny Donne

Weight Control
The Fat of the Land
NAVY BEANS
PEANUT BU

© Penny Donne, 1976
All Rights Reserved

TITLE: Weight Control: The Fat of the Land

AUTHOR: Penny Donne

INSTITUTION: West Valley College, Saratoga, Calif.

ESTIMATED WORKING TIME: 50 Minutes

INTENDED STUDENTS: Health Care Worker

MATERIALS NEEDED: Food models or pictures of food, some of which represent concentrated calorie foods; copies of three popular diets - 1) high-protein, 2) high-carbohydrate, 3) high-fat.

FIELD TEST COPY

> NOTE: Effective use of this unit requires that a qualified nutritional instructor be available for the student to consult with. It is also necessary that the student have prior skills in recognizing the major nutrients and the components of the Basic Four.

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue ◻ Westwood Center ◻ Suite 925 ◻ Los Angeles, CA 90024 ◻ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

INTRODUCTION

"Fat" is no longer beautiful. It is known now that fat can be dangerous. Despite a nation where almost everyone knows that fat is dangerous, the people are continually fighting the "losing" battle, yet, few succeed in losing weight, or if they do lose then they rarely are able to keep the weight off.

Too little "fat" can be dangerous too. The underweight person also runs a health risk.

You, as a Health Care Worker, may be called upon to help clients understand why it is important to reach and maintain a healthy weight through sensible means.

This learning package is designed to give you practice in identifying the major considerations related to weight control so that you can help these clients.

OBJECTIVES OF UNIT

Read the objectives below and then turn to the Practice Exercises to begin your instruction.

OVERALL OBJECTIVE

You will be able to identify the major factors to consider in weight control.

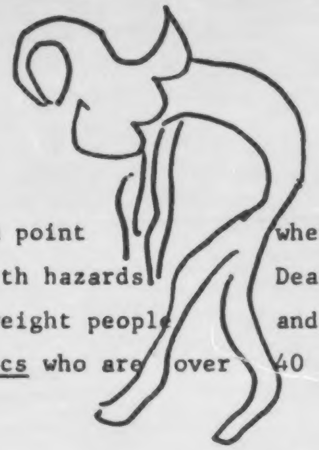
SUB-OBJECTIVES

At the completion of this unit, you will be able to:

1. List two common illnesses which are closely correlated to overweight.
2. Identify two behavioral factors which lead to overweight.
3. Identify situations which illustrate weight loss, weight gain, and weight maintenance.
4. Select from a group of general possibilities the best guide for determining the adequacy of the calorie intake of an individual.
5. Identify that there are some calories needed by the body daily that the individual has no control over.
6. Identify the number of pounds considered safe to lose per week.
7. Differentiate among those nutrients that provide calories in the diet and those nutrients that do not provide calories in the diet.
8. Specify the nutrient which provides a greater number of calories than the other calorie-providing nutrients.
9. Indicate foods appropriately included in a weight-reduction diet and foods which should probably be omitted.
10. Differentiate relative effectiveness of different types exercise.
11. Identify the weight-reduction regimen which research studies find most successful for long-term weight control.
12. Compare four current diets to the basic four.
13. Identify the appropriate medical hazard to the type of weight reduction diet.
14. Explain why there may be little or no weight loss during the first week or two of a weight-reduction diet.
15. List three hazards associated with underweight.
16. Identify foods which are most apt to increase the total energy input of an underweight individual and explain why these foods can work for this purpose.

NOW TURN TO PRACTICE EXERCISE #1 ON THE NEXT PAGE.

PRACTICE EXERCISE #1



INPUT

America has become "weighted" down to the grim point where overeating and underexercise have become major health hazards. Death from cardiovascular disease is 40% greater in overweight people and 65% greater in obese people. Of the 80% of diabetics who are over 40 years old, 85% of them are obese.

PRACTICE QUESTION #1

Name two common illnesses which are related to overweight.

1) ______________________________

2) ______________________________

PRACTICE EXERCISE #1

FEEDBACK

1) Cardiovascular disease
2) Diabetes

Get them right? Good, Now turn to Practice Exercise #2 to see why people tend to get overweight.

How To Kill Yourself
EAT
DRINK
AND
BE
MERRY

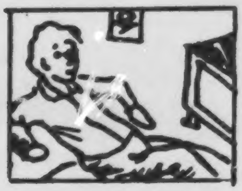
PRACTICE EXERCISE #2

INPUT

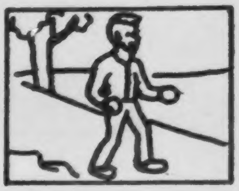
Knowing that overweight is a problem, your question may then be "why do people become overweight?" While there are many factors involved, most often it has been found that eating more than we need and exercising less than we need are the most important reasons for overweight. Frequently the overeating comes from liking to eat with friends between and after meals. The too little exercise happens because we use mechanical items for work and entertainment. These mechanical items have displaced our use of our body. For instance, we generally do not walk or cycle to school but ride a bus or drive a car.

PRACTICE QUESTION #2

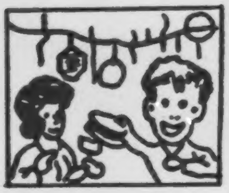
1) Look at the pictures below. Circle the letter of those behaviors which result in weight gain.



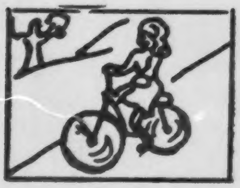
A.



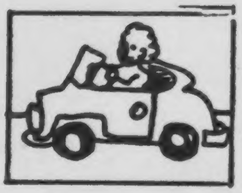
B.



C.



D.



E.

2) Overweight is most often the result of which two behaviors?

A. ____

B. ____

PRACTICE EXERCISE #2

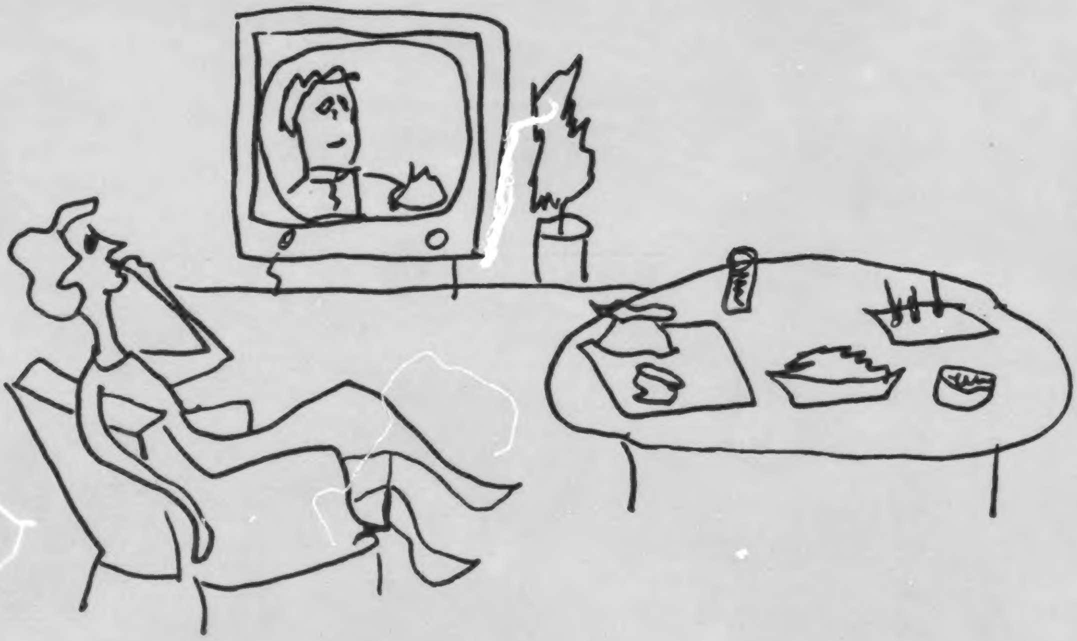
FEEDBACK

1) A. Lack of exercise
   C. Eating
   E. Driving a Car

2) A. Eating more than we need
   B. Exercising less than we need

Take a peek at a common behavior illustrated on the next page and then go on to practice Exercise #3.

ENERGY BALANCE WHILE
WATCHING TV



OUTPUT

Two hours watching TV= 158 calories

INPUT

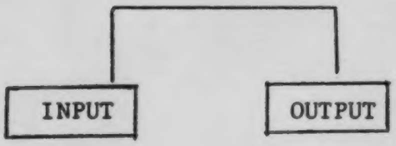
Snack Calories = 955

1 coffee with 2 T Cream
  and 2 tsp sugar = 100
1 can beer = 175
1 cup buttered popcorn= 155
15 peanuts = 85
1 chocolate bar = 270
10 cheese crackers = 170

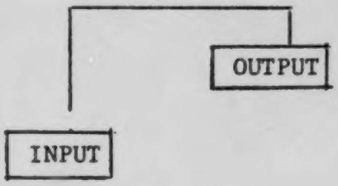
PRACTICE EXERCISE #3

INPUT

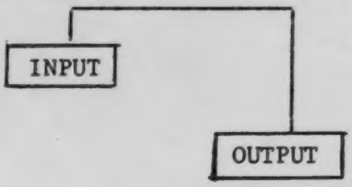
The daily food need of each person is different. When a person does not gain or lose weight, you can tell that person that he is maintaining his weight. This means that the calories eaten each day (input) are the same number as the calories being used up each day (output). If a person gains weight, he is eating more than he is using up. If he is losing weight, he is working off more than he is eating. Study the following before doing practice question #3.



a. maintaining



b. gaining



c. losing

In each of the above, assume the scale is the individual. Each box is labeled with the word "input" or "output", whichever describes what is happening with this person according to the direction words in a, b, or c.

PRACTICE QUESTION #3

Complete the following:

1) If a person is eating as much as he is using up he is ________________ weight.

2) If a person is eating more than he is using up he is ________________ weight.

3) If a person is eating less than he is using up he is ________________ weight.

PRACTICE QUESTION #3

FEEDBACK

1) Maintaining
2) Gaining
3) Losing

PRACTICE EXERCISE #4

INPUT

Now it is easy for you to tell a client how he can be the judge of whether he is getting the right number of calories. If he is maintaining, he is eating the amount needed and working the amount needed to keep his weight just where it is. Of course, if he is not at a weight considered desirable by his doctor, he will need to lose or gain weight until he reaches his desirable weight and then keep that weight by maintaining.

PRACTICE QUESTION #4

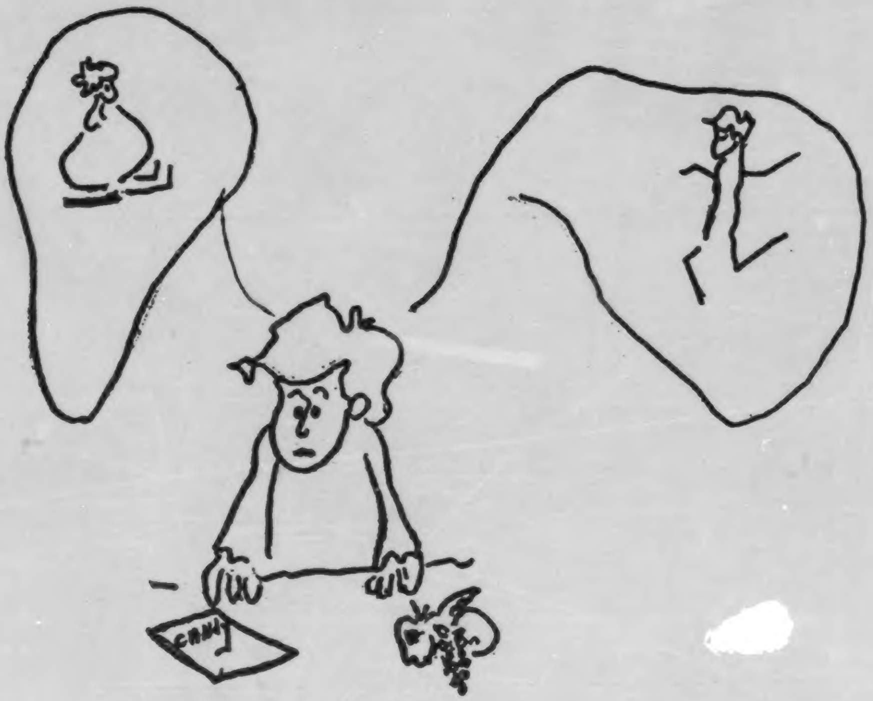
Once a desirable weight has been attained, you need to figure out whether the right number of calories are being eaten and used each day from then on. This is best judged by which of the following guides:

a. Minimum daily requirements
b. recommended daily allowance
c. food exchange list
d. basic four
e. maintaining the desirable weight

PRACTICE EXERCISE #4

FEEDBACK

e. maintaining the desirable weight



WHICH

PRACTICE EXERCISE #5

INPUT

It is important to know that food input and exercise output are guides to help each of us maintain our weight. However, since there are so many people who want to get to their desirable weight super fast and try to do this by eating just as few calories a day as they think they can get away with, it is extremely important that you be able to explain to them that there are some things that take place inside of us that require calories. We call these things involuntary activities because they happen whether we want them to or not. We have no control over them. Examples of these involuntary activities are maintaining our body temperature, the beating of our hearts, digesting of our food, movement of our blood from one place to another in the body. Voluntary activities are those we decide to do like running, eating and drinking. If we do not get enough calories to let our internal machine work (our involuntary activities), our body begins to work less and less efficiently and in the process starts to use up the heart, kidneys and other important working parts of the body by using those parts for energy. Result: those parts may become damaged.

PRACTICE QUESTION #5

Next to the number in column #1 place the appropriate letter from column #2.

_____ 1) Heart a. Voluntary
_____ 2) Digesting food b. Involuntary
_____ 3) Blood flow
_____ 4) Canoeing

PRACTICE EXERCISE #5

FEEDBACK

1) b
2) b
3) b
4) a

PRACTICE EXERCISE #6

INPUT

Because it is possible for people to damage themselves by improper dieting, a number of studies have been done to figure out what would be a "safe" number of pounds to lose per week. The ideal weight loss is around two pounds per week.

PRACTICE QUESTION #6

The number of pounds considered safe to lose per week are ______________.

PRACTICE EXERCISE #6

FEEDBACK

Two pounds

PRACTICE EXERCISE #7

INPUT

In order to help a person choose foods on a weight control diet, it is very helpful to understand which nutrients that make up foods contain calories and which nutrients do not contain calories. Nutrients that provide calories are fat, carbohydrate and protein. Nutrients that do not provide calories are minerals, vitamins and water.

PRACTICE QUESTION #7

1) List the nutrients that provide calories to the diet.
   a. ______________________________
   b. ______________________________
   c. ______________________________

2) List the nutrients which do not provide calories to the diet.
   a. ______________________________
   b. ______________________________
   c. ______________________________

PRACTICE EXERCISE # 7

FEEDBACK

1) a. Fat
   b. Carbohydrate
   c. Protein

2) a. Vitamin
   b. Minerals
   c. Water

NO!
1000 Calories

PRACTICE EXERCISE #8

INPUT

Think about what you ate yesterday. You probably had a combination of foods including those that were low in calories such as green beans and tomato juice as well as some high in calories such as doughnuts and salad dressings. Losing weight is a slow process. It helps a client to plan what to eat and what to stay away from if he knows which nutrients give him more calories than he wants. Fat is a nutrient that offers more calories than either protein or carbohydrate. Therefore, any food that is made of more fat than protein or carbohydrate will be giving the body a greater number of calories such as the doughnuts and salad dressings mentioned.

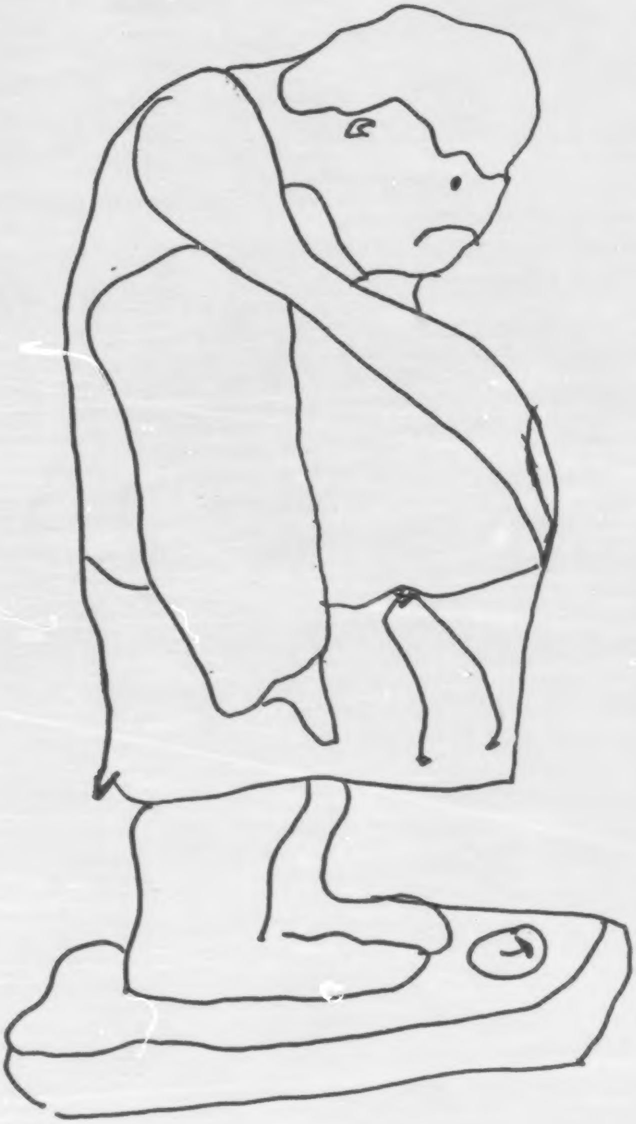
PRACTICE QUESTION #8

Which nutrient provides more calories to the diet than any other nutrient? ______________________________

PRACTICE EXERCISE #8

FEEDBACK

Fat



"I WONDER IF
IT WAS THE
MARACHINO
CHERRY?"

PRACTICE EXERCISE #9

INPUT

Examples of foods with a high percentage of fat in them are fried foods, salad dressings, butter, cream, pastas, gravies, nuts, pastries, avocados, olives, meats eaten with fat not trimmed away. Of course, there are foods that are concentrated sources of carbohydrates which also should be used with care when weight-reduction is the goal. Such foods as alcohol, jellies and jams, ice cream, soft drinks, dried fruits, very sweet fruits, winter squash, potatoes are examples of carbohydrate foods to be used carefully. Notice that sweeter foods give more calories and/or the drier foods give more calories.

PRACTICE QUESTION #9

1) Place the number 1 next to the foods considered high in fat and concentrated carbohydrate calories.

   a. _____ mayonnaise
   b. _____ chocolate frosted cupcake
   c. _____ roast beef with gravy
   d. _____ dill pickle
   e. _____ doughnut
   f. _____ tomato juice
   g. _____ potato

2) Explain, in your own words, what points you would make to a client regarding the choice of one of the following foods to be selected for a snack on a weight-reduction diet. (a tomato; an orange; a potato.)

   ____

   ____

   ____

PRACTICE EXERCISE #9

FEEDBACK

1. a, b, c, e, g

2. Did you point out that a tomato has a lot of water but is not particularly sweet?

   An orange also has a lot of water but is quite sweet.

   A potato has some water but not as much as an orange or a tomato (therefore, a more concentrated carbohydrate).

   The best (lowest calories) choice is the tomato.

YOU'RE DOING VERY WELL. NOW THAT YOU HAVE THOUGHT ABOUT DIFFERENT FOODS AS THEY AFFECT WEIGHT CONTROL, NOW GO ON TO PRACTICE EXERCISE #10 TO TAKE A LOOK AT HOW EXERCISE ALSO AFFECTS WEIGHT CONTROL.

PRACTICE EXERCISE #10

INPUT

Just as the types of nutrients combined into foods give you different kinds of calories input, exercise performed to use up calories varies in its effectiveness according to the kind of exercise done. It takes 34 minutes of swimming (not 14 minutes of swimming and 20 minutes of suntanning) to use up the same number of calories you may have just eaten in a slice of apple pie (377 calories). If you decide to walk to use up those calories, you will have to walk about four miles. Suddenly that piece of apple pie looms as a very large piece of pie, doesn't it!

PRACTICE QUESTION #10

Refer to the chart below on Energy Equivalents of Food Calories Expressed in Minutes of Activity.

1. Does bicycle riding or swimming use up the calories in a doughnut faster ___________________.

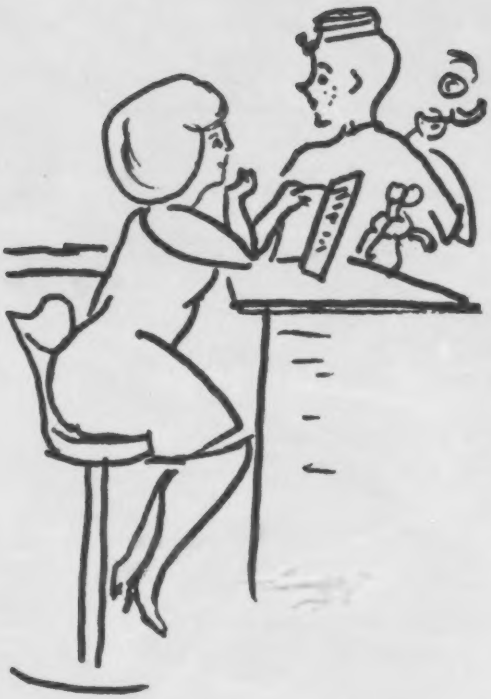
ENERGY EQUIVALENTS OF FOOD CALORIES EXPRESSED IN MINUTES OF ACTIVITY

FOOD	CALORIES	ACTIVITY			
		WALKING min.	BICYCLE min.	SWIMMING min.	RUNNING min.
Apple, large	101	19	12	9	5
Bacon, 2 strips	96	18	12	9	5
Banana, small	88	17	11	8	4
Beer, 1 glass	114	22	14	10	6
Bread and butter, 1 slice	78	15	10	7	4
Cake, 1/12, 2-layer	356	68	43	32	18
Carbonated beveraged	106	20	13	9	5
Chicken, fried	232	45	28	21	12
Doughnut	151	29	18	13	8
French Dressing,1 tbsp.	59	11	7	5	3
Ice cream, 1/6 qt.	193	37	24	17	10
Milk, 1 glass	166	32	20	15	9
Skim Milk, 1 glass	81	16	10	7	4

PRACTICE EXERCISE #10

FEEDBACK

swimming



"I'll have a banana split with chopped nuts and lots of whipped cream---and a diet soda, please."

PRACTICE EXERCISE #11

INPUT

The desire for better appearance combined with the knowledge of a possible health hazard makes overweight people prone to be victims of every newly proposed "magic way" to weight loss. If any of the fad diets were a satisfactory remedy for weight reduction, why would there be new ones being proposed every few months? Over and over again it is found that a sensible diet based primarily on the Basic Four is the most successful for long term weight loss as well as maintenance once desirable weight is achieved. An example of such a diet is the Weight-Watcher's diet.

PRACTICE QUESTION #11

The Weight-Watcher's Diet is an example of a weight reduction diet found to be most successful for long-term weight control because it is primarily based on the ________________________________.

PRACTICE EXERCISE #11

FEEDBACK

Basic Four

PRACTICE EXERCISE #12

INPUT

Are you aware that many of the proposed fad diets can injure the body? And, that the diets themselves become health hazards? Most of these diets do not provide a balanced number of nutrients to keep the "internal machine" running efficiently.

PRACTICE QUESTION #12

Obtain a copy of and compare to the Basic Four the food groups of the following diets:

1) a popular high-protein diet
2) a popular high-carbohydrate diet
3) a popular high-fat diet

Beside each diet list the food group(s) which is(are) deficient in the diet.

1) high-protein diet ______________________________
____
2) high-carbohydrate diet ___________________________
____
3) high-fat diet _________________________________
____

PRACTICE EXERCISE #12

FEEDBACK

Consult with the instructor. Be sure to have with you your copies of the popular diets you chose.

TEN CALORIE DIET

Monday:

Breakfast--Weak Tea
Lunch --1 Bouillon Cube in ½C Diluted Water
Dinner --1 Pigeon Thigh & 3 oz. Prune Juice

Tuesday:

Breakfast--Scraped Crumbs from Burnt Toast
Lunch --Doughnut Hole (w/o sugar) & 1 Glass Dehydrated Water
Dinner --Canary Eyebrows Stewed (Fat Removed)

Wednesday:

Breakfast--Boiled Out Stains of Tablecloth
Lunch --One-Half Dozen Poppy Seeds
Dinner --Bee's Knees & Mosquito Knuckles Sauted with Vinegar

Thursday:

Breakfast--Shredded Egg-Shell Skins
Lunch --Belly Button from a Naval Orange
Dinner --Three Eyes from Irish Potato (Diced)

Friday:

Breakfast--Four Chopped Banana Seeds
Lunch --Broiled Butterfly Liver
Dinner --Fillet of Soft Shell Crab Claw

Saturday:

Breakfast--Two Lobster Antennae
Lunch --One Guppy Fin
Dinner --Jelly Fish Vertebrae a la Bookbinder

Sunday:

Breakfast--Pickled Humming Bird Tongue
Lunch --Prime Ribs of Tadpole
Dinner --Tossed Paprika & Clover Leaf (one salad only)

Directions:

1. All meals to be eaten under microscope to avoid extra portions.
2. Second Week: Reversed
3. Third Week: Funeral (Choice of Directors)

Source Unknown

PRACTICE EXERCISE #13

INPUT

As you saw when looking at the foods used in these diets, rather than each being a balanced diet providing building materials and calories for energy, some of the diets deprive the body of very necessary nutrients and some deprive the body of enough calories to run the "internal machine" as well. This means that such unbalanced diets are hazardous to the body. How? For instance, how could eating a lot of protein be injurious? If you take off on a high-protein diet and are unaware of having a kidney infection or malfunction, you could make the kidney problem worse as the kidney struggles to throw off the waste products of protein foods.

You notice that one of the diets was a high-fat diet. This is also risky for such a diet can cause diarrhea which in turn means constant loss of water, minerals, vitamins. The least serious result of this is fatigue. What about the low carbohydrate content of some of these diets? Besides not being able to "burn" up the fat you are trying to get rid of, they play havoc with the blood sugar level in the body and lead to fatigue, irritability and depression.

In addition, if the diet allows so few calories that the body has to use itself for energy (as the Simeon diet does), the body uses not only its fat but the important protein in the muscles and organs. In addition the body is inefficiently using energy and becomes fatigued.

So some examples of hazards with popular diets are:

1. high protein = kidney problem risks
2. high fat = fatigue and nutrient losses
3. low carbohydrate = fatigue, irritability and depression
4. too few calories = fatigue and use of body protein for energy. (too little input)

Study 1 through 4 above carefully before doing Practice Question #13.

PRACTICE QUESTION #13

Before the appropriate hazard place the letter(s) of all the diets which may cause such hazards:

_____	1) kidney problems risks	a. high fat
_____	2) fatigue, irritability, depression	b. low carbohydrate
_____	3) unbalanced	c. high protein
_____	4) use of body protein for energy	d. too few calories

PRACTICE EXERCISE #13

FEEDBACK

1) c
2) a, b
3) a, b, c, d
4) d

PRACTICE EXERCISE #14

INPUT

And, finally, we can't let you move any further without one last help to answering your clients' needs. A client should realized the first two or three weeks on a well-planned, low-calorie diet may bring no weight loss--there may even be a small gain. The body needs to adjust to the calorie change and it frequently takes two to three weeks to do this adjusting before weight loss becomes evident. Encourage them to "hang in there".

PRACTICE QUESTION #14

1) How many weeks might it be before a client sees a weight loss ______________________.

2) Why? ____

PRACTICE EXERCISE #14

FEEDBACK

1) 2-3 weeks
2) body must adjust to calorie change

NOW TAKE THE POST TEST.

POST TEST

1. List two common illnesses which are closely correlated to overweight

   a. ______________________________

   b. ______________________________

2. Mrs. Lane has returned to school after raising her family. She attends classes and studies in the library all day Monday through Friday. In the evenings she relaxes with friends at bridge and dessert get-togethers. Mrs. Lane notices that she is gaining weight. From the following list circle the most probable reasons for Mrs. Lane's weight gain.

   a. emotional problem
   b. insufficient exercise
   c. value placed on eating when we socialize

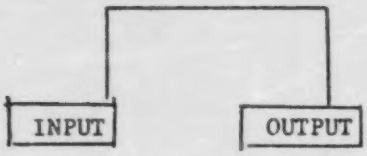
3. Circle the correct answers. The following nutrients provide calories in the diet:

   a. vitamins
   b. protein
   c. water
   d. minerals
   e. carbohydrates
   f. fats

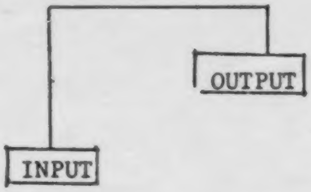
4. Using the following chart choose which activity will most effectively work off one piece of apple pie (377 calories). answer ________________.

Walking	68 minutes uses about 375 calories
Running	19 minutes uses about 375 calories
Lying Down	290 minutes uses about 375 calories
Bicycle	46 minutes uses about 375 calories
Swimming	34 minutes uses about 375 calories

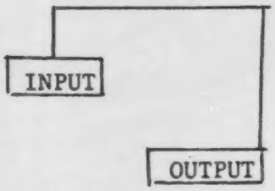
4. Label the diagrams given below illustrating three variations in energy balance. That is, write loss under the diagram showing weight loss; gain under the diagram showing weight gain; and maintenance under the diagram showing weight maintenance.



A. ____________________



B. ________________



C. ______________

6. The best guide for determining adequacy of caloric intake for an individual is:
   a. The recommended daily allowance
   b. Maintaining desirable weight for the individual
   c. The Basic Four Food Groups
   d. The six food exchange lists
   e. The minimum daily requirements

7. Circle the following body reactions which are involuntary use of calories.
   a. Beating of heart muscle
   b. Maintaining body temperature
   c. Driving a car
   d. Swimming
   e. Digesting of food

8. The number of pounds considered safe to lose a week are:
   a. 2
   b. 4
   c. 5
   d. 7

9. Complete the following statement in the space provided:
   The nutrient which provides a greater number of calories than other calorie-providing nutrients is ________________________.

10. Using the attached food picture cards, withdraw those which represent concentrated calorie foods (i.e. high fat/concentrated carbohydrates)

11. Before each number of column I write the letters of the hazards from column II which correspond to the appropriate diet.

I	II
___ 1) High Protein	a. risk of kidney problems
___ 2) High Fat	b. causes fatigue and depression
___ 3) Low Carbohydrate	c. uses body protein for energy

12. Explain why there may be little or no weight loss during the first several week of a weight reduction diet.

____

____

____

POST TEST ANSWERS

1. a. Diabetes
   b. Cardiovascular disease
2. b, c
3. b, e, f
4. running
5. a. maintaining
   b. gaining
   c. losing
6. b
7. a, b, e
8. a
9. fat
10. Consult with instructor
11. 1. a
    2. b
    3. b
12. Body adjusting to calorie change.

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue ☐ Westwood Center ☐ Suite 925 ☐ Los Angeles, CA 90024 ☐ 213 478-1411 / 473-4982

ESTIMATING SERVINGS PER POUND OF COOKED MEAT

(OR)

HOW MUCH MEAT SHALL I BUY???

by

Carolyn H. Gustafson, R.D.

© Carolyn H. Gustafson, R.D., 1976
All Rights Reserved

TITLE:	Estimating Servings per Pound of Cooked Meat
AUTHOR:	Carolyn H. Gustafson, R.D.
INSTITUTION:	West Valley College, Saratoga, Calif.
INTENDED STUDENTS:	Community health workers; dietetic assistant; residential care administrators; consumers
ESTIMATED WORKING TIME:	30 minutes
MATERIALS NEEDED:	You may find it useful to use a small calculator
REVISED:	March 1, 1978

NOTE: A small calculator will be helpful, but not essential, for the student using this unit.

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue ☐ Westwood Center ☐ Suite 925 ☐ Los Angeles, CA 90024 ☐ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

Meat costs usually account for approximately 30 to 40% of the food budget. The cost per pound of meat must be considered in relation to the cost of a cooked serving rather than the cost of a pound of meat as purchased. Some meats have large amounts of inedible bone, gristle, and fat which affect the cost per servings. Also, these affect the number of servings one may obtain from a pound of meat.

This package is designed to help you learn how to estimate how many pounds of meat you will need to purchase in order to provide a 3 oz. portion of cooked meat for each person.

OBJECTIVES OF UNIT

OVERALL OBJECTIVE

Given any number of people, you will be able to estimate how many pounds of meat you will need to purchase in order to provide a 3 oz. portion of cooked meat.

SUB-OBJECTIVES

1. You will choose from a list of meats those examples that belong in the
   a. "Boneless" group
   b. "Moderate bone" group
   c. "Considerable bone, gristle, and fat" group.
2. You will estimate the number of servings per pound of cooked meat according to the amount of inedible bone, gristle and/or fat.
3. You will plan how many pounds of meat you need to purchase in order to serve each person a 3 oz. portion.

PRACTICE EXERCISE # 1

INPUT

When you plan your food order, you seldom have a table that shows you exactly how much meat to purchase in order to serve each client a 3 oz. cooked portion. You wish you had a general rule that you could use. The other day you served shortribs and ran out. You did not consider the amount of bone in the shortribs. The following method of estimating the servings per pound of cooked meat should prevent you from running out of shortribs next time you serve them on the menu.

Meat can be divided into three distinct groups according to the amount of bone, gristle, or fat.

GROUP A	BONELESS:		Hamburger; boneless roasts; organ meats such as liver, kidney; beef stew; uncooked fish fillets and boneless steaks; canned ham; center cuts of ham. London broil.
GROUP B	MODERATE BONE:		Loin chops and steaks; poultry; roasts with bone in; dressed fish, whole pork hams.
GROUP C	CONSIDERABLE BONE, GRISTLE, FAT:		Rib chops of lamb, pork, or veal; plate and breast of lamb or veal; porterhouse, club, T-bone steak; chicken wings and backs; shortribs; spareribs.

Did you look carefully at each group???

In GROUP A you should note that there is little or no visible waste. The only waste you expect to have would be from the cooking, otherwise "what you see is what you eat"!!!!

GROUP B has some visible bone and fat but not a lot. You will have some waste to take home in the "Doggie Bag" but Bowser will not be as happy with your having meat from this group as he will from Group C.

Look at GROUP C. The visible bone, fat, and gristle is what you see. In fact you could think of this group as the "Bone with a little meat on it". This is Bowser's favorite.

Before you take the practice test, I would recommend that you go back and memorize which meats go into each GROUP!!!!!

PRACTICE QUESTION # 1

Assign the following meats to one of the three groups according to the amount of bone per pound. Place a check in the appropriate column under A, B, or C.

MEAT	(A) BONELESS	(B) MODERATE BONE	(C) CONSIDERABLE BONE, GRISTLE, FAT
Beef kidney			
Breast of lamb			
Shortribs			
Loin chop			

FEEDBACK # 1

MEAT	(A) BONELESS	(B) MODERATE BONE	(C) CONSIDERABLE BONE, GRISTLE, FAT
Beef kidney	X		
Breast of lamb			X
Shortribs			X
Loin chop		X	

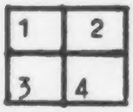
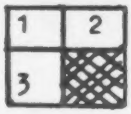
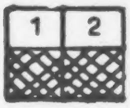
PRACTICE EXERCISE # 2

INPUT

Now that you and "Bowser" have memorized what meats go into which group, you are ready to figure how many 3 oz. servings you can expect to obtain from a pound of cooked meat.

Here is the same table but I have added some new material.

ESTIMATING SERVINGS PER POUND OF COOKED MEAT *

GROUP	MEAT	SIZE OF SERVING	NUMBER OF SERVINGS/lb. (cooked)
A	**BONELESS:** Hamburger; boneless roast; organ meats such as liver, kidney; beef stew; uncooked fish fillets and boneless steaks; canned ham; center cuts of ham. 	3 oz.	3 to 4 (3.5 average) 
B	**MODERATE BONE:** Loin chops and steaks; poultry; roasts with bone in; dressed fish; whole pork hams. 	3 oz.	2 to 3 (2.5 average) 
C	**CONSIDERABLE BONE, GRISTLE, FAT:** Rib chops of lamb, pork, or veal; plate and breast of lamb or veal porterhouse, club, T-bone steak; chicken wings and backs; shortribs; spareribs. 	3 oz.	1 to 2 (1.5 average) 

Let's take an example.

You must plan a meal for four people. The menu calls for Hearty beef stew for each person. Beef stew meat is in GROUP A or BONELESS. The table shows that we can estimate that meats in the Boneless group can be expected to provide 3 to 4 servings per pound of cooked meat or an average of 3.5 servings per pound of cooked meat.

* Source

"Your Money's Worth in Food", USDA, Home and Garden Bulletin No. 183, 1973, P. 11.

Therefore, you should plan to purchase about 1 pound of beef stew meat if you are to serve all four people. Of course "Bowser" would like it if you would purchase an extra pound, but at $1.29 per pound, that is expensive dog food.

Do you see how this method could help you estimate the servings per pound of any given meat????????

GROUP B provides 2 to 3 three-oz. servings per pound of cooked meat or an average of 2.5 servings per pound.

GROUP C provides 1 to 2 three-oz. servings per pound of cooked meat or an average of 1.5 servings per pound.

REMINDER

When using this method to estimate servings per pound - USE THE AVERAGE SERVINGS FIGURE

GROUP A	3.5 servings
GROUP B	2.5 servings
GROUP C	1.5 servings

PRACTICE QUESTION # 2

2. Write in column 2 the number of 3 oz. servings per pound of meat you would expect to obtain.

(1) MEAT	(2) NUMBER OF SERVINGS PER POUND/COOKED
Fish fillet	
Rump roast Bone-in	
B.B.Q. Chicken wings	

FEEDBACK # 2

(1) MEAT	(2) NUMBER OF SERVINGS PER POUND/COOKED
Fish fillet	3.5
Rump roast Bone-in	2.5
B.B.Q. Chicken wings	1.5

PRACTICE EXERCISE # 3

Input

We have one more step to do??????!!!!!!!

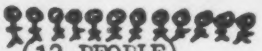
Now that you know which meats belong in each of the three groups and you also know the number of 3 oz. servings you can expect to obtain from a pound of cooked meat, you can then estimate the number of pounds of meat you need to purchase for any given number of people.

The FORMULA you will use is:

$$\frac{\text{(NUMBER PEOPLE TO SERVE)}}{\text{Average number of servings per pound (cooked)}} = \text{Pounds of meat to purchase}$$

EXAMPLE

If we expect to obtain an average of 1.5 servings (3 oz.) per pound of cooked GROUP C, we then could figure how many pounds we need for 12 people by dividing number of servings into number of people.



$$\frac{\text{(12 PEOPLE)}}{\text{1.5 Average servings}} = \text{8 lbs.} \quad \text{(OR)} \quad \frac{12}{1.5} = \text{8 lbs.}$$

In this example you should purchase about 8 lbs. of GROUP C meat. Here comes "Bowser" again, this time with his own "Doggie Bag".

PRACTICE QUESTION # 3

3. Write in the number of pounds of meat required to allow each person a 3 oz. cooked portion. (Refer to servings chart.)

NUMBER OF PEOPLE	HAMBURGER	SPARERIBS	CHICKEN
3			
9			
12			

FEEDBACK # 3

NUMBER OF PEOPLE	HAMBURGER	SPARERIBS	CHICKEN
3	.85	2	1.2
9	2.5	6	3.6
12	3.4	8	4.8

If you got them all correct, congratulations!

You're ready for the POST-TEST on the next page.

If you missed any, better go back and review.

POST-TEST

1. Assign the following meats to one of the three groups according to the amount of bone per pound. Place a check in the appropriate column under A, B, or C.

MEAT	(A) BONELESS	(B) MODERATE BONE	(C) CONSIDERABLE BONE, GRISTLE, FAT
Chicken wings			
Loin chop			
Calves liver			
Spareribs			

2. Write in column 2 the number of 3-oz. servings per pound of meat you would expect to obtain.

(1) MEAT	(2) AVERAGE NIMBER OF SERVINGS PER POUND
Beef shortribs	
Beef liver	
Chicken	

3. Write in the number of pounds of meat required to allow each person a 3-oz. cooked portion.

NUMBER OF PEOPLE	HAMBURGER	SPARERIBS	CHICKEN
4			
6			
8			

4. Finally, plan a meat entree (your choice) for a given number of people (your choice) and figure how many pounds of meat you would need to purchase to serve the people.

Post-Test Answer Key

1.

MEAT	(A) BONELESS	(B) MODERATE BONE	(C) CONSIDERABLE BONE, GRISTLE, FAT
Chicken wings			X
Loin chop		X	
Calves liver	X		
Spareribs			X

2.

(1) MEAT	(2) NUMBER OF SERVINGS PER POUND/COOKED
Beef shortribs	1.5
Beef liver	3.5
Chicken	2.5

3.

NUMBER OF PEOPLE	HAMBURGER	SPARERIBS	CHICKEN
4	1.14	2.6	1.6
6	1.7	4	2.4
8	2.3	5.3	3.2

4. If your answer checks out with the cart on page 5 and formula on page 9, you have put this unit to work successfully.

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411 / 473-4982

The Factor Method for Adjusting Standardized Recipe Yield

by

Carolyn H. Gustafson, R.D.

Illustrated by Lauren Richardson

© Carolyn H. Gustafson, R.D., 1976
All Rights Reserved

TITLE: Factor Method for Adjusting Standardized Recipe Yield

AUTHOR: Carolyn H. Gustafson, R.D.

INSTITUTION: West Valley College, Saratoga, Calif.

INTENDED STUDENTS: Hospital dietitians

ESTIMATED WORKING TIME: 30 minutes

MATERIALS NEEDED: None

FIELD TEST COPY

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

INTRODUCTION

There are many advantages to having standardized recipes adjusted to your hospital needs. They let you know the exact number of servings to be expected; they give the same results each time the recipe is followed, take the guesswork out of food preparation, and help you predict the food cost. This information helps you purchase food more accurately, since you can estimate exactly the amounts of foods that will be needed.

With the high cost of food, no longer can you take a recipe for 25 and multiply each item by 3 and prepare 75 portions if you are serving 60 patients. You can not afford to have 15 portions left over after serving a meal.

This package is designed to help you learn how to adjust standardized recipes to yield the number of servings you need.

OBJECTIVES OF UNIT

Overall Objective

You will use a basic formula to convert standardized recipes to provide desired recipe yields.

Sub-Objectives

You will:

1) Write the basic formula used in converting basic recipe yields.

2) Convert from ounces to decimal parts of a pound.

3) Calculate various weights to demonstrate your ability to make adjustments by using the basic formula for converting recipe ingredients.

4) Adjust recipes to both the number of servings required and the desired size of these servings.

PRACTICE EXERCISE # 1

Input

You work in a hospital dietary department that serves 75 patients. The other day one of the cooks brought in a recipe for 50 portions. You and your supervisor agree it sounds like a good menu item but you must adjust the recipe up to 75 if you are to serve it to all of your patients.

Now you know why you should know how to adjust a recipe. You can't use the recipe the cook brought in because it yields too few portions. You could let the cook make the recipe by adding a little extra of each ingredient and hope it turns out "ok." If I were you, I would adjust it mathematically. Then the recipe would have all of its ingredients in their correct proportion, and the total yield would be exactly equivalent to the number of servings desired.

The basic formula for adjusting the ingredients in any recipe to provide a desired number of servings is given below.

FORMULA:

$$\frac{\text{Number Servings Desired}}{\text{Number Servings Known}} = \text{Ingredient Factor}$$

(OR)

FORMULA (for specific case):

$$\frac{\text{Servings Required (Desired): 75}}{\text{RECIPE YIELD (Known): 50}} = \text{Ingredient Factor}$$

The NUMBER SERVINGS DESIRED is the number of patients you must serve. In the example you must serve 75 patients. 75 is the NUMBER SERVINGS DESIRED.

The NUMBER SERVINGS KNOWN is the number of servings you will obtain from the original recipe. In the example the cook brought in a recipe for 50 portions. 50 is the NUMBER SERVINGS KNOWN.

The Ingredient Factor is a ratio of the number of servings desired to the number servings known.

Practice Exercise # 1 (Cont.)

REMEMBER the recipe the cook brought in was for 50 portions. You need 75 portions if you are to use the recipe.

EXAMPLE: $\frac{75}{50} = 1.5$ Method:

$$\begin{array}{r} 1.5 \\ 50\,\overline{)\,75.0} \\ \underline{50} \\ 250 \\ \underline{250} \end{array}$$

Now we have divided the NUMBER SERVINGS DESIRED, which in this case is 75; by the NUMBER OF SERVINGS KNOWN, the recipe the cook brought in for 50. Thus we have obtained the basic INGREDIENT FACTOR, which in this example is 1.5.

Serves 50
with 75 to feed
That leaves 25
Hungry Patients!
Recipe
Serves 50

Practice Exercise # 1 (cont.)

PRACTICE QUESTION # 1

1) Write the basic formula used in adjusting standardized recipes.

2) Imagine you work in a dietary department that serves 75 patients. You have a recipe for 30 portions. What is the ingredient factor?

3) Calculate the following ingredient factors:

	Number Servings Known	Number Servings Desired	Ingredient Factor
a.	20	50	2.5
b.	35	25	---
c.	50	70	---
d.	100	75	---

Practice Exercise # 1 (Cont.)

Feedback:

Check your answers to the questions on the preceding page with those listed here:

1) FORMULA: $\frac{\text{Number servings desired}}{\text{Number servings known}} = $ Ingredient Factor

2) 2.5 factor $\frac{75}{30} = 2.5$

3) a. $\frac{50}{20} = 2.5$

   b. $\frac{25}{35} = 0.7$

   c. $\frac{70}{50} = 1.4$

   d. $\frac{75}{100} = 0.75$

These results check your accuracy in following the mathematical formula used to determine the Ingredient Factor. Now you are ready for the second step that will make you proficient in achieving our overall objective of converting standardized recipes into ingredient quantities that meet the needs of each individual situation.

PRACTICE EXERCISE # 2

Input

There is one more procedure you should know how to do before you actually adjust ingredients in a recipe. You must be able to adjust OUNCES indicated in recipes to their equivalent DECIMAL PART OF A POUND.

Now turn to TABLE 1 on the next page. Read the instructions at the top of the page carefully.

EXAMPLE A: Use Table 1

Ingredient A calls for 1 lb. 8 oz. Find the arrow that points to 8 oz. 8 oz. is .500 decimal part of 1 pound. Therefore 1 lb. 8 oz. is equal to 1.5 pounds.

EXAMPLE B: Use Table 1

Ingredient B calls for 1.5 pounds. .5 is not 5 oz. It is a decimal part of a pound.

Find .5 decimal part of a pound. Read in the column immediately to the left. .500 decimal parts of a pound equals 8 oz.

PRACTICE QUESTION # 2

Using Table 1, find the following ounces or Decimal parts of a pound:

OUNCES	DECIMAL PART OF A POUND
a. 1	----------
b. ---	.313
c. ---	.938
d. 3/4	----------

Feedback

a. .063
b. 5 oz.
c. 15 oz.
d. .047

Table to Use in Factor Method for Adjusting Recipe Yield

TABLE 1--Ounces and their decimal equivalents of a pound

When you use the FACTOR method for adjusting recipe yield, you may find this table helpful if you prefer to work with pounds and decimal parts of a pound instead of multiplying pounds and ounces by the FACTOR. For example, ingredient A might appear in your recipe as 5 pounds 10 ounces. To change the ounces to decimal parts of a pound, read the value across from 10 ounces on the table. Your value is, thus 5.625 pounds.

This table will also be useful in adjusting yield figures for operations which may have scales and recipes set up in decimal parts of a pound (tenths and hundreds).

Ounces	Decimal part of a pound	Ounces	Decimal part of a pound	Ounces	Decimal part of a pound	Ounces	Decimal part of a pound
1/4	.016	4-1/4	.266	8-1/4	.516	12-1/4	.766
1/2	.031	4-1/2	.281	8-1/2	.531	12-1/2	.781
3/4	.047	4-3/4	.297	8-3/4	.547	12-3/4	.797
1	.063	5	.313	9	.563	13	.813
1-1/4	.078	5-1/4	.328	9-1/4	.578	13-1/4	.828
1-1/2	.094	5-1/2	.344	9-1/2	.594	13-1/2	.844
1-3/4	.109	5-3/4	.359	9-3/4	.609	13-3/4	.859
2	.125	6	.375	10	.625	14	.875
2-1/4	.141	6-1/4	.391	10-1/4	.641	14-1/4	.891
2-1/2	.156	6-1/2	.406	10-1/2	.656	14-1/2	.906
2-3/4	.172	6-3/4	.422	10-3/4	.672	14-3/4	.922
3	.188	7	.438	11	.688	15	.938
3-1/4	.203	7-1/4	.453	11-1/4	.703	15-1/4	.953
3-1/2	.219	7-1/2	.469	11-1/2	.719	15-1/2	.969
3-3/4	.234	7-3/4	.484	11-3/4	.734	15-3/4	.984
4	.250	8	.500	12	.750	16	1.000

PRACTICE EXERCISE # 3

Input

Now you have learned how to figure the ingredient factor and read TABLE 1. How do you put it all together? Remember in practice Exercise # 1 the cook brought in a recipe for 50 portions. You have decided to use it on your menu but you must adjust it to serve 75 patients. You also figured the ingredient factor to be 1.5.

The recipe for 50 the cook brought in calls for 1 lb. 8 oz. flour. In order to adjust the 1 lb. 8 oz. of flour to include it in the recipe for 75, you must multiply the quantity of flour by the ingredient factor of 1.5.

PLEASE NOTE:

YOU MUST MULTIPLY THE POUNDS AND OUNCES SEPARATELY

EXAMPLE:

The recipe calls for 1 lb. 8 oz. flour

1. The 1 lb. flour x 1.5 (factor) = 1.5 lb. flour
2. The 8 oz. flour x 1.5 (factor) = 12 oz. flour

(OR)

$$\begin{array}{r} 1 \text{ lb. flour} \\ \times\ \underline{1.5 \text{ (factor)}} \\ 1.5 \text{ lb. flour} \end{array} \qquad \begin{array}{r} 8 \text{ oz. flour} \\ \times\ \underline{1.5 \text{ (factor)}} \\ 12 \text{ oz. flour} \end{array}$$

(You may not add the 1.5 lb. flour with the 12 oz. flour as the .5 of the 1.5 lb. flour is a decimal part of a pound. It is not 5 oz.)

REMINDER: 16 oz. = lb.

Now you can not tell the cook to put 1.5 lbs. flour plus 12 oz. of flour in the recipe for the 75 patients. The cook must know the total amount of flour in pounds and ounces that is to be included in the recipe.

You will find it easier when using the factor method of adjusting recipe yield if you use Table 1. Remember Table 1 shows ounces and Decimal parts of a pound.

Practice Exercise # 3 (Cont.)

In the example the recipe calls for 1 lb. 8 oz. flour. If you use Table 1, you will find that 8 oz. is .500 Decimal parts of a pound (see the arrow on Table 1). Therefore the 1 lb. 8 oz. is equal to 1.5 lbs. flour. When you change the ounces to a decimal part of a pound you can multiply the pounds and decimal part of a pound by the ingredient factor in one procedure.

Thus: 1.5 lb. flour x 1.5 (factor) = 2.25 lb. flour.

Again, you can not tell the cook to use 2.25 lbs. flour. So get back to Table 1.

EXAMPLE:

Need to know: 2.25 lbs. flour = ?

We find .25 decimal parts of a pound and read the ounces to the left to find that .25 decimal parts of a pound = 4 ounces.

Thus 2 lbs. plus 4 oz. = 2 lbs. 4 oz.

Now you can tell the cook to add 2 lbs. 4 oz. flour to the recipe for 75 patients.

STUDY TABLE 1 VERY CAREFULLY

PRACTICE QUESTION # 3

1) Using the formula and Table 1, adjust the following ingredients to 75 portions and 30 portions:

INGREDIENT	50 PORTIONS	75 PORTIONS	30 PORTIONS
A	2 lb. 12 oz.	4 lb. 2 oz.	a.________
B	8 lb. 9 oz.	b.________	c.________

2) What factor did you use for the 75 portions? ____________

3) What factor did you use for the 30 portions? ____________

Feedback

1) a. 1 lb. 10-1/2 oz.

2 lb. 12 oz. = 2.750

2.750 lb.
x .06 (factor)
1.65 lb.

1.65 lb.= 1 lb. 10-1/2 oz. (See Table 1)

b. 12 lb. 13-1/2 oz.

8 lb. 9 oz. = 8.563 lb.

8.563 lb.
x 1.5 (factor)
12.844 lb.

12.844 lb.= 12 lb. 13-1/2 oz. (See Table 1)

c. 5 lb. 2-1/4 oz.

8 lb. 9 oz.- 8.563

8.563 lb.
x 0.6 (factor)
5.139 lb.

5.139 lb.= 5 lb. 2-1/4 oz. (See Table 1)

2) 1.5 factor $\frac{75}{50} = 1.5$

3) 0.6 factor $\frac{30}{50} = 0.6$

YOU ARE ALMOST DONE!

Now please take the post test on the next page.

Please do not write on this page - Use the Answer Sheet

POST-TEST

1. Write the basic formula used in adjusting standardized recipe yield.

2. Adjust the following ingredients for 25 portions to 60 portions using the above formula and Table 1.

INGREDIENT	25 portions	60 portions
A	6 lb. 4 oz.	a.________
B.	12 lb. 9 oz.	b.________
C	21 lb. 15 oz.	c.________

3. Using Table 1, find the following ounces or decimal parts of a pound.

OUNCES	DECIMAL PART OF A POUND
1	a.________
b.________	.313
c.________	.938
9-3/4	d.________

CONGRATULATIONS YOU FINISHED

You won't have to eat all those left-overs!

POST-TEST SCORING KEY

1. FORMULA $\dfrac{\text{Number servings desired}}{\text{Number servings known}}$ = Ingredient Factor

2. a. 15 lbs. 6 lb. 4 oz. = 6.250 lb.

$$\begin{array}{rl} & 6.250\text{ lb.} \\ \times & \underline{2.4} \quad \text{(factor)} \\ & 15\text{ lb.} \end{array}$$

   b. 30 lbs. 2-1/2 oz. 12 lb. 9 oz. = 12.563 lb.

$$\begin{array}{rl} & 12.563\text{ lb.} \\ \times & \underline{2.4} \quad \text{(factor)} \\ & 30.151\text{ lb.} \end{array}$$

30.151 lb. = 30 lb. 2-1/2 oz.

   c. 52 lbs. 10-1/2 oz. 21 lb. 15 oz. = 21.938 lb.

$$\begin{array}{rl} & 21.938\text{ lb.} \\ \times & \underline{2.4} \quad \text{(factor)} \\ & 52.651\text{ lb.} \end{array}$$

52.651 lb. = 52 lb. 10-1/2 oz.

3. a. .063 Look up 1 oz. and read decimal part of a pound.

   b. 5 oz. Look up .313 decimal part of a pound and read ounces

   c. 15 oz. Look up .938 decimal part of a pound and read ounces

   d. .609 Look up 9 3/4 oz. and read decimal part of a pound

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

BECOMING FAMILIAR WITH ROUTINE DIETS

By

Lee Weller Callaway, R.D., Ph.D.

Lauren Richardson, Illustrator

©Lee Weller Callaway, 1976
All Rights Reserved

TITLE OF PACKAGE: Becoming Familiar With Routine Diets

AUTHOR: Lee Weller Callaway, R.D., Ph.D.

INSTITUTION: West Valley College, Saratoga, Calif.

INTENDED STUDENTS: LVN, Home Health Aide, Dietetic Assistant, Dietetic Technician, Community Worker, Medical Assistant

ESTIMATED WORKING TIME: 30 minutes

MATERIALS NEEDED: None; however, it would be advantageous to have visual display of foods for diets

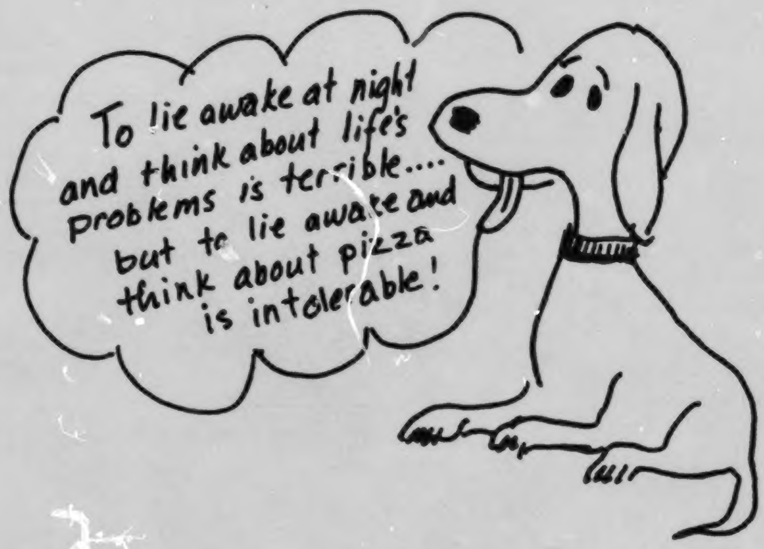
REVISED: June 15, 1977

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

INTRODUCTION

As an individual in the health care field you will be called upon many times to decide whether the diet chosen by someone is compatible with his prescribed diet.

This unit will help you identify the major routine diets and to determine the appropriateness of an accompanying menu.


To lie awake at night and think about life's problems is terrible.... but to lie awake and think about pizza is intolerable!

OBJECTIVES OF UNIT

Overall Objective

Upon completing this unit, you will be able to identify the four most commonly used routine diets. Given a hypothetical situation, you will be able to select the menu containing the appropriate foods for each routine diet.

Sub-Objectives

- You will be able to define "routine diets".
- Given a list of diets, you will be able to identify the four diets that are considered routine.
- You will be able to analyze the types of foods included on the routine diets, and you will be able to identify which are considered liquid diets and which are basically solid food diets.
- Given a case study, you will be able to select the menu containing the most appropriate foods from sample menus.
- When you have completed this unit, you will be able to select the most appropriate foods for each of the four routine diets.

It has long been recognized that food has many functions in our lives; such as insuring proper growth and development, or helping in the treatment of various diseases.

The majority of individuals in our country - and in our hospitals or other institutions -, can eat all types of foods. They do not require a diet in which the ratio of nutrients is altered.

Physicians and patients frequently move around the country, or are shifted from one institution to another. Consequently, it is desirable to have a small number of diets that are defined similarly by all persons involved.

Such diets are called "routine diets" and are necessary in most hospitals and other types of institutions for reasons of economy, efficiency, convenience and uniformity of service. They can be used by all persons who eat a normal or regular diet since a "routine diet" is either a regular diet or a regular diet that has a change only in consistency to make the foods easier to digest.

These are the important factors of "routine diets":

1) small number of diets
2) general use by most institutions
3) regular diet, or
4) regular diet that is modified only in consistency to improve digestibility.

Generally then, "routine diets" are: small number of diets that are in general use by most institutions. They consist of a regular diet and those diets which are developed by modifying only the consistency of the regular diet to improve digestibility.

Practice Question 1

Dr. Pain has ordered a new diet for your patient. You do not know exactly what it is yet, but you do know the following:

A "routine diet" is (definition) ____________________________

Answer:

Obviously, your definition could have been expressed in many forms. To see if you have defined "routine diet" correctly, check that your definition contains these four factors:

1) small number of diets
2) general use by most institutions
3) regular diet, or
4) regular diet which is modified only in consistency to improve digestibility.

If your answer contained each of the above four factors, you have succeeded in defining "routine diets" correctly.

You will find that a given institution may have several diets which, by the previous definition, could be classified as routine. However, all institutions that have routine diets have a minimum of four and these are the ones this learning unit is going to concentrate on.

You should remember, however, that in a working situation your hospital may have additional routine diets. But there are four routine diets commonly used by all institutions.

Practice Question 2

Dr. Pain tells you he has written diet orders for the patient in Room 206. He says that the diet is one of the hospital's routine diets. Since the institution has only a limited number of routine diets you realize that he has made his choice from a total of (number) ____________.

Answer:

Since you have not seen Dr. Pain's diet orders, you do not know the exact diet he has prescribed. However, in specifying that the diet was one of your hospital's routine diets your answer would be correct if you wrote down __4__.

It is important for you to be able to identify routine diets from other diets.

The four routine diets common to most institutions are:

1) Regular
2) Soft
3) Full Liquid
4) Clear Liquid

These diets meet all the characteristics you learned earlier: they are used by most institutions; they are a small number of diets; they consist of a regular diet and those diets which are developed by changing only the consistency of the regular diet.

Practice Question 3

From the following diets, check those that are classified as "routine".

A. ________ Regular
B. ________ Bland
C. ________ Low protein
D. ________ Soft
E. ________ Full liquid
F. ________ High vitamin
G. ________ Clear liquid

Answer:

If you checked A, D, E and G - you are correct.

Only those four diets meet our definition of routine diets so they should have been the ones you selected. The bland, low protein, and high vitamin diets all represent modifications of the regular diet, but the changes involve more than just a change in consistency.

If you selected diets other than A, D, E and G, go back and read this section again.

If you were 100% correct, read on!

The four routine diets can be divided, for ease of recognition, into two groups with two diets in each. The diets are now grouped according to their consistency -- that is, whether they contain solid or liquid food.

We'll concentrate on the solid food routine diets first; the two routine diets which contain solid food are: regular and soft.

REGULAR DIET

The regular diet is served to ambulatory patients and those patients who do not require a therapeutic diet. Many factors affect the choice of food served on this diet (type of hospital, budget, social-economic level of patients, etc.). However, it may contain any or all foods that any healthy person may eat. Highly spiced foods are usually avoided since they lead to digestive difficulties in many persons. Otherwise, all meats, eggs, milk, fruits, vegetables, breads, cereals and fats are allowed.

The regular diet is used as the foundation for planning the other routine diets. Remember that a regular diet may have any foods on it that will not cause digestive problems to the patient.

Study the following menus carefully and review the types of foods included so that you can pick a regular menu or tray of foods out of the group.

Breakfast

Orange Juice

All-Bran Cereal w/ cream, sugar

Scrambled Egg

Bacon Slices

Whole Wheat Toast w/ butter, jelly

Coffee w/cream, sugar

Lunch

Turkey Tetrazinni

Buttered Green Beans

Pineapple, Banana, Orange Salad

Peach Crisp

Beverage

Dinner

Fried Chicken

Baked Potato

Buttered Asparagus

Tossed Green Salad w/ dressing

Cheese Cake

Beverage

REGULAR DIET

SOFT DIET

When the regular diet is modified slightly in consistency, the next routine diet formed is called a Soft Diet. The soft diet has soft textured solid foods and liquids. It is an intermediate step between regular and liquid diets. It is indicated in post-operative cases, acute infections and gastrointestinal conditions. Also, it is frequently ordered for a patient who has trouble chewing.

The soft diet contains foods which do not have much fiber or cellulose and are easily digested.

The following menus are examples of soft diets:

Breakfast	Lunch	Dinner
Apple Juice	Roast Beef	Cream of Pea Soup
Cream of Wheat w/ cream, sugar	Mashed Potatoes	Ham Loaf
Scrambled Egg	Creamed Peas	Mashed Sweet Potatoes
White Toast w/ fortified margarine	Vanilla Pudding	French Green Beans
Coffee	Beverage	Angel Food Cake
		Beverage

SOFT

DIET

Few spices or condiments are used in the preparation of soft diets. The foods are cooked simply, and fried foods and rich pastries are omitted. Bran and strong or gas forming vegetables are avoided, as well as most raw vegetables and fruits.

> Remember that the soft diet contains foods with a soft texture. You will not find raw cucumbers, bran or whole grain products on this diet. Nothing spicy is included.

Study carefully the menus of the soft diets above and types of food included on this diet so that you could distinguish it from other routine diets.

Practice Question 4

A. Check all the diets below that are solid food routine diets:

1)_________ Pureed

2)_________ Soft

3)_________ High vitamin

4)_________ Bland

5)_________ Regular

B. Peggy is a 17-year-old who has been hospitalized for observation after a fall from a horse. She is allowed a regular diet. Which of the following is the most representative of a Regular Diet? (Circle number of correct diet)

(1)	(2)	(3)
Broth	Tomato Soup	Apple Juice
Roast Beef	Bland Meatballs over rice	Chicken Broth
Corn on the Cob	Creamed Peas	Cherry Gelatin
Zucchini	Custard	Coffee w/sugar
Milk	Milk	

C. Mr. M. is 94 years old and has dentures. He loves all kinds of foods but has trouble chewing. Which menu would represent the Soft Diet he needs? (Circle number)

(1)	(2)
Orange Juice	Orange Juice
All-Bran Cereal w/ cream, sugar	Cream of Wheat w/ cream, sugar
Fried Egg	Soft Cooked Egg
Whole Wheat Toast w/ fortified margarine	White Toast w/ fortified margarine
Coffee	Coffee

Answer:

A. If you checked 2 and 5 as being routine diets that are solid food diets you are correct. The remaining diets either do not contain solid foods, or they are not routine diets.

B. Peggy can have a regular diet. In theory, of course, by our definition she could have any of the menus given in the question since all foods can be included on a regular diet. However, (1) is the menu that most closely approximates the foods included on a regular diet.

You should have eliminated (3) since it contained only liquid foods and Peggy could eat solid foods. While (2) has solid foods, they are obviously all soft and mildly seasoned, no crunchy foods are included. If you had chosen this one, Peggy would have had a very monotonous diet. Number 1 is correct -- it contains a wide variety of foods with many textures.

C. Number (2) is the correct answer. Because Mr. M. has trouble chewing he might have a difficult time handling the All-Bran cereal, and fried foods are not included on a Soft Diet.

If you missed any part of Practice Question 4, please go back and review this section.

If you got this far correctly......

hang in there......

you're almost done!

We'll now be concentrating on the remaining two liquid food routine diets; they are:

FULL LIQUID

CLEAR LIQUID

Full Liquid Diet

The full liquid diet is usually the bridge between soft diet and the clear liquid diet. Although the full liquid diet can be made to be nutritionally adequate, it is generally not and so it should only be used for a limited period of time. It is usually prescribed for the postoperative patient, or the patient acutely ill with an infection, gastrointestinal tract disturbances or a heart attack.

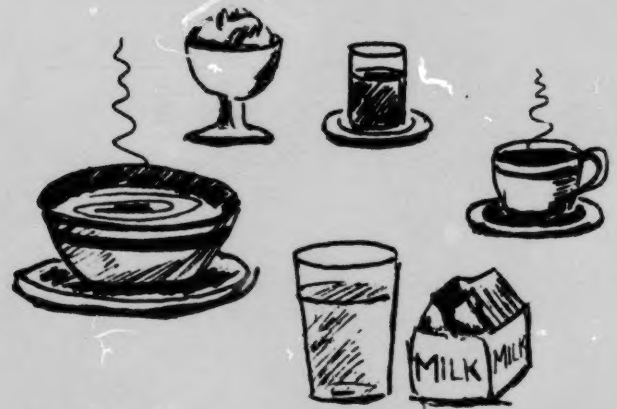
The full liquid diet usually consists of all foods that are liquid at room or body temperature. For example, gelatin and custard are not liquid at room temperature, however, they are liquid at body temperature so they can be included on a full liquid diet. Strained, refined cereals (Cream of Wheat or rice) are also called liquids on this diet.

Foods allowed on a full liquid diet include: milk beverages, milk, strained cream or broth soups, tea, coffee, fruit or vegetable juices, ice cream or sherbet, gelatin, carbonated beverages, custards, puddings, strained refined cereals, and eggnogs.

Remember that the full liquid diet can have all foods that are liquid at room or body temperature. Although pureed foods (baby food consistency) may appear to be liquids, they are not considered such on this diet.

Carefully study the menus below so that you could select a full liquid diet from a group of menus.

Breakfast	Lunch	Dinner
Grapefruit Juice	Strained Cream of Asparagus Soup	Strained Cream of Potato Soup
Cream of Wheat w/ cream, sugar	Tomato Juice	Apricot Nectar
Eggnog	Custard	Lime Gelatin
Milk	Milk	Milkshake
Coffee	Coffee	Tea



FULL
LIQUID
DIET

CLEAR LIQUID DIET

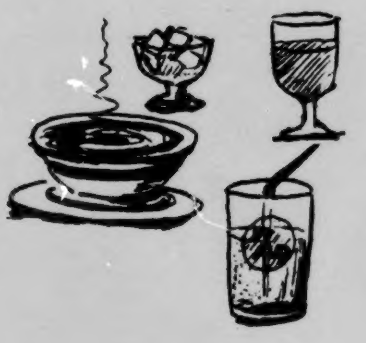
The clear liquid diet is a grossly inadequate diet both in terms of nutrients and total calories. Its purpose is to relieve thirst and dehydration and to start peristalsis (intestinal action) in recent postoperative patients. It is frequently given to alleviate symptoms of nausea. Because it is so poor nutritionally, it should only be used for one or two days.

All liquids must be transparent or clear to be considered a part of this diet. The foods included on this diet are extremely limited and you will probably be able to remember them easily.

The only foods allowed on the clear liquid diet are: coffee, tea, fat-free broth, gelatin, clear fruit juices (apple, grape, cranberry) and carbonated drinks.

Study the following menus carefully, as well as the types of foods included on this diet, so that you can pick a clear liquid diet out of a group of menus.

Breakfast	Lunch	Dinner
Apple Juice	Cranberry Juice	Grape Juice
Chicken Broth	Beef Broth	Consomme
Cherry Gelatin	Strawberry Gelatin	Lime Gelatin
Coffee w/sugar	7-Up	Tea w/ lemon, sugar



CLEAR

LIQUID

DIET

Remember only transparent liquids are on a clear liquid diet -- if you can't see through it, it isn't on this diet.

Practice Question 5

A. Check all the diets below that are liquid routine diets:

1. ______Liquid tube feeding
2. ______Clear liquid
3. ______Pureed
4. ______Full liquid
5. ______Soft

B. Peter has a bad case of the flu and doesn't really feel like eating much food. He is not nauseated, but feels that a liquid diet would be better for lunch. Which menu best represents a full liquid diet?

(1)	(2)	(3)
Cream of Tomato Soup	Apple Juice	Cream of Tomato Soup
Custard	Consomme	Meatloaf w/gravy
Milkshake	Cherry Gelatin	Mashed Potatoes
	Tea w/ sugar	Green Beans
		Beverage

C. Mr. R. is a terminal cancer patient. He is being treated with large doses of drugs that upset his stomach. In such cases a clear liquid is frequently recommended. Which of the following is representative of a clear liquid diet?

(1)	(2)	(3)
Apple Juice	Grape Juice	Cranberry Juice
Chicken Broth	Strained Cream of Mushroom Soup	Strained Beef Barley Soup
Eggnog	Custard	Raspberry Gelatin
7-Up	Coffee	Tea

Answer:

A. If you answered (2) and (4), you are correct. Pureed and soft diets are not liquid diets and the tube feeding is not a routine diet.

B. You should have chosen (1).

Number (2) contained only clear liquids and although all clear liquids are included on a full liquid diet, such restrictions are not desirable if more nutritious full liquid foods are ordered.

Number (3) is a soft diet, it contains solid foods and so can't be classified as a liquid at room or body temperature.

C. The correct answer is number (3).

Number (1) looks like a clear liquid but it includes eggnog, which is not a transparent liquid.

Number (2) is a full liquid diet; it contains cream soup, etc.

If you missed any part of this section, please review.

If you correctly answered the practice questions, you should be very proud of yourself! You have learned a good many things.

Proceed to the Post-Test on the next page.

POST-TEST

1. In your own words, define the term "routine diet".

____

____

____

____

____

____

2. Study the following list of diets; check all those that are considered to be "routine".

A. ______ Bland
B. ______ Regular
C. ______ Soft
D. ______ Clear liquid
E. ______ High protein
F. ______ Pureed
G. ______ Full liquid

3. Go back to the diets you selected/checked in Question 2, and indicate for each diet you selected (the list of diets is repeated below) whether they are a Liquid (L) or Solid (S) food routine diet.

A. ______ Bland
B. ______ Regular
C. ______ Soft
D. ______ Clear liquid
E. ______ High Protein
F. ______ Pureed
G. ______ Full liquid

4. Examine the sample menus that follow:

Menu #1

Tossed Green Salad
w/ dressing

Chili Con Carne

Beef Taco

Refried Beans

Buttered Rice

Chocolate Cake

Beer

Menu #2

Tomato Juice

Roast Beef

Buttered Egg Noodles

Buttered Peas

Sliced Peaches

Milk

Menu #3

Fresh Fruit Salad

Fried Chicken

Whole Kernel Corn

Buttered Spinach

Hard Roll w/fortified
margarine

Fresh Strawberries

Milk

Menu #4

Orange Juice

Cream of Tomato Soup

Custard

Chocolate Milkshake

Menu #5

Grape Juice

Strained Beef Barley Soup

Strawberry Gelatin

Coffee w/sugar

4. (Continued)

Now read each situation below and select the appropriate menu for each from the sample menus you've just read.

A. Mrs. B is a secretary who has recently had all her wisdom teeth removed. She has a little difficulty chewing, but can eat solid foods. The menu she should be following is #___________

B. Johnny is a 6-year-old who is hospitalized for a broken leg. He has the usual likes and dislikes for a boy of his age and he does not need a modified diet. He sould be eating foods similar to menu #___________

C. Mr. L was operated on this morning for an ulcer. He has been out from under the general anesthetic for several hours and states that he's starving; he has only been allowed to have broth, Jello and tea up to now. The doctor does not want him to have solid foods until tomorrow. What menu should he be following? #___________

D. Mrs. P is 2 months pregnant and is suffering from such severe nausea that she can't keep any solid food down. Which menu should she try in order to reduce the nausea? #___________

5. Was this learning unit: Valuable to you ____ Clear ____
Waste of time ____ Confusing ____

ANSWERS TO POST-TEST

1. Routine diets are a small number of diets that are in general use by most institutions consisting of a regular diet and those diets which are developed by modifying only the consistency of the regular diet to improve digestibility. Your definition probably won't be worded exactly as above, but if it includes the four points listed below, consider your answer correct:

   (1) small number of diets
   (2) general use by most institutions
   (3) regular diet which is modified only in consistency to improve digestibility

2. B. Regular
   C. Soft
   D. Clear Liquid
   G. Full Liquid

3. B. (S) Solid
   C. (S) Solid
   D. (L) Liquid
   G. (L) Liquid

4. A. Menu #2
   B. Menu #3
   C. Menu #4
   D. Menu #5

5. Thank you for your response.

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

HYPERTENSION - LOW SODIUM DIET

By

Evelyn S Burgess, R.D.

© Evelyn S. Burgess R.D., 1976
All Rights Reserved

TITLE:	Hypertension - Low Sodium Diet
AUTHOR:	Evelyn S. Burgess, R.D.
INSTITUTION:	Cuyahoga Community College, Cleveland, Ohio
INTENDED STUDENTS:	Nursing, dietetic technologist
ESTIMATED WORKING TIME:	20 minutes
MATERIALS NEEDED:	None

FIELD TEST COPY

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue ☐ Westwood Center ☐ Suite 925 ☐ Los Angeles, CA 90024 ☐ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

INTRODUCTION

Illness that requires the use of a low-sodium diet must be carefully explained to the lay citizen so that he can live as normal as possible an existence without fear of becoming a chronic invalid. To help the patient understand his role in maintaining this special diet, you may need to give a great deal of instruction in selecting, budgeting, shopping, meal planning and food preparation.

In completing this learning unit on hypertension and the low sodium diet, you will recall significant information about the diet. You will:

Specify the kinds of illness that require the use of a low-sodium diet.

Match probable level of dietary sodium restriction to given illnesses.

Name the kind of foods that are recommended for a low-sodium diet.

List changes in shopping, meal planning and food preparation that are required for the low-sodium diet.

PRACTICE EXERCISE #1

Hypertension alone is not a disease. It is a symptom with complications interrelating to many disorders. One of its common clinical problems is cardiovascular disease.

Little is known about its primary source and causes. Dahl's studies reveal that hypertension is susceptible to an excessive use of salt.

The normal kidney adjusts quickly to different levels of sodium intake. Kidney damage is closely associated to chronic renal disease. The noticeable symptoms are loss of flexibility and inability to make the adjustment needed.

The inability of the tubes ot reabsorb sodium is a common cause in salt wasting.

Persons with chronic renal disease must ingest an amount of sodium equal to urinary loss in order to remain in sodium balance.

Practice Question #1

List two illnesses which require the use of a low-sodium diet.

WHAT,
NO na cl?

Feedback:

a. hypertension
b. kidney disease

PRACTICE EXERCISE #2

Restrictive sodium intake is used to treat cardiac edema because of the role of sodium in water retention.

Three levels of dietary sodium restriction have been outlined by the American Heart Association and are in common use throughout the United States.

The level of restrictions are Mild low-sodium diet (2,000 to 4,500 Milligrams of sodium); moderate low-sodium (1000 milligrams); strict low-sodium diet (500 milligrams).

Practice Question #2

How many milligrams of sodium would you expect these patients to be restricted to?

1) Borderline normal and slight hypertension ________
2) Severe kidney disease ________
3) Severe cardiac edema ________

1)	Borderline normal and slight hypertension	2,000-4,500
2)	Severe kidney disease	500
3)	Severe cardiac edema	500

PRACTICE EXERCISE #3

The taste for salt is acquired. The taste and use varies from high amount to a lighter amount of salt.

In adults the average dialy intake of sodium ranges from about 3 to 4 grams with lighter taste; 10 to 12 grams with heavy use.

The main source of dietary sodium is in sodium chloride, common table salt. Certain foods contain natural high sodium content. Some classified foods are:

Fresh vegetables:	Frozen vegetables:
carrots, spinich celery, beets, greens, white turnips, mustard greens	same; also lima beans and peas, mixed vegetables or any frozen vegetable to which salt has been added.

Most extensive list of food with high sodium content may be found in American Heart Association pamphlets on sodium restricted diets.

PRACTICE QUESTION #3

A patient has been placed on a low-sodium diet. List five fresh or frozen vegetables he should not eat.

FEEDBACK

a. carrots
b. spinach
c. frozen limas
d. celery
e. frozen peas
f. beets
g. mustard greens
h. white turnips
i. frozen mixed vegetables
j. salted frozen vegetables

PRACTICE EXERCISE #4

INPUT

The cardiac vascular disease is of a chronic nature, which requires long care. Early education in the care of the person's health and welfare needs should begin at the start of convalescence and not close to the discharge period.

Clear knowledge and positive needs to provide continuous, sound, and vigorous self care within the limits of the person's capacity are the kinds of instructions to be given.

Discussions including foods allowed should be one of the first ideas to convey.

Foods allowed include fresh or frozen green beans, turnip greens, wax beans, broccoli, corn, mushrooms, asparagus, fresh and frozen fruits, fresh poultry and beef, lamb, veal, liver, or fresh pork, canned meats and fish without salt.

PRACTICE QUESTION #4

Name five foods which the person on a low-sodium diet can eat.

FEEDBACK

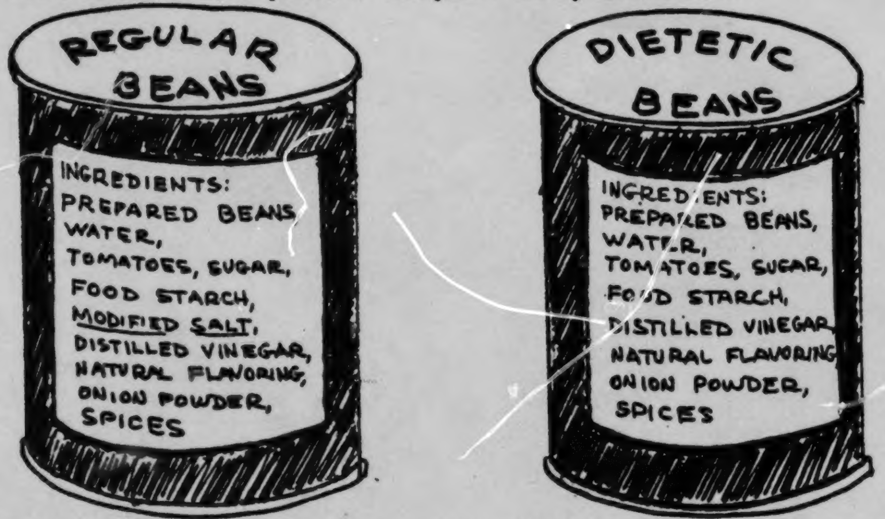
a. fresh poultry
b. fresh or frozen asparagus
c. fresh pork
d. fresh or frozen green beans
e. beef
f. liver
g. lamb
h. corn
i. fresh or frozen fruits
j. broccoli

PRACTICE EXERCISE #5

Input:

Persons who are restricted to a low-sodium diet must be made aware of the transition which influences his shopping habits. Shopping habits relative to taste must be curtailed.

A rigid selective planned shopping list made up of foods with low-sodium content is the only kind to be considered. Ability to read labels and cost is most essential to provide adequate daily allowance.


REGULAR BEANS
INGREDIENTS:
PREPARED BEANS
WATER,
TOMATOES, SUGAR,
FOOD STARCH,
MODIFIED SALT,
DISTILLED VINEGAR,
NATURAL FLAVORING,
ONION POWDER,
SPICES
DIETETIC BEANS
INGREDIENTS:
PREPARED BEANS,
WATER,
TOMATOES, SUGAR,
FOOD STARCH,
DISTILLED VINEGAR,
NATURAL FLAVORING,
ONION POWDER,
SPICES

Another major change which has to be religiously controlled are food items customarily included in meals corresponding with the ethnic and religious background. Meals should be adjusted to preserve the tradition without sacrificing the health of the person.

Each meal session should deal with the preparation of palatable, accepted foods. Carefully selected herbs, seeds and spices are available to enhance the flavors. Among these choices for seasoning are garlic, bay leaves, carraway seed, curry powder and all-spice.

Practice Question #5

List two examples of changes in shopping, meal planning and food preparation that you might make for a low-sodium diet.

Feedback:

Any of these would be correct.

a. Select foods with a low-sodium content
b. Read labels to determine sodium content
c. Adjust my meal planning to the sodium-diet
d. Plan meals around the persons eating habits with low-sodium meals
e. Use a non-sodium seasoning

Flavor ideas for vegetables and for meat, poultry, fish and eggs are listed on the next two pages. Look these over for your own information before proceeding to the Post-Test.

ANSWER SHEET FOR PRACTICE QUESTIONS

1. 1)

2)

2. 1)

2)

3)

3. 1)

2)

3)

4)

5)

4. 1)

2)

3)

4)

5)

5. 1)

2)

ANSWER SHEET FOR POST-TEST

1. 1)
   2)

2.

3. 1)
   2)
   3)
   4)
   5)

4. 1)
   2)
   3)
   4)
   5)

5. 1)
   2)

POST-TEST

1. Name two illnesses which require the use of a low-sodium diet.

2. A patient with sever kidney disease is given a strict low-sodium diet. How many milligrams of sodium would you expect him to be allowed?

3. Name five kinds of foods which should be excluded from the low-sodium diet.

4. List five foods which are recommended for a low-sodium diet.

5. Give two examples of changes in shopping, meal planning and food preparation that you might make for a low sodium diet.

POST TEST ANSWER KEY

1. Hypertension and kidney disease.

2. 500 mg.

3. Spinach, carrots, frozen lima beans, celery, frozen peas

4. Fresh poultry or fresh or frozen asparagus, fresh pork, fresh or frozen green beans and beef.

5. Select foods with a low-sodium content
   Read labels to determine the sodium content
   Adjust my meal planning to the low-sodium diet
   Plan meals around the person's eating habits with low-sodium foods
   Use a non-sodium seasoning.

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

PLANNING A ONE-DAY MENU
FOR A PATIENT ON A
0.5 GM. SODIUM RESTRICTED DIET

by

Minda S. Graff

ⓒMinda S. Graff, 1977
All Rights Reserved

TITLE: Planning a One-Day Menu For a Patient On a 0.5 Sodium Diet

AUTHOR: Minda S. Graff

INSTITUTION: Merritt College

INTENDED STUDENTS: Nurse aide; home health aide; nutrition; nursing

ESTIMATED WORKING TIME: 1 hour

MATERIALS NEEDED: Red, yellow, green felt pens; Bag of groceries or simulated container for
- Jello,
- mustard,
- D-zerta (lo-sodium, lo-calorie),
- Lipton Cup-o-Soup,
- garbanzos (canned),
- can lima beans,
- evaporated skim milk,
- Alba 66-Hot Chocolate Mix (lo-calorie)

FIELD TEST COPY

HEALTH INSTRUCTION EXCHANGE
1100 Glendon Avenue □ Westwood Center □ Suite 925 □ Los Angeles, CA 90024 □ 213 478-1411
A PROJECT OF THE LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

INTRODUCTION

As a home health aide you will be going into homes to plan and prepare meals for patients on sodium restricted diets.

The doctor has ordered such a diet for your patient because he may have a heart condition or a kidney condition. Sodium must be restricted to prevent his condition from getting worse or even life-threatening.

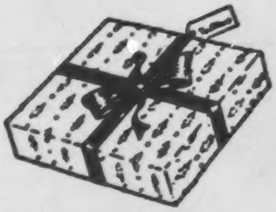
However, your patient needs nutritious food, a well-balanced diet. He also needs foods he will eat!

Your choice of food for his meals can be made in consultation with him but you must know the restrictions because he may not. You may have to be his "teacher."

But don't force foods on him he really dislikes. Select permitted foods he enjoys. Then be a "sales person," if necessary, in your adventure into the land of spices and herbs.

In this package I am giving you, you will

1. identify sodium compounds in packaged foods.
2. identify some common additives in foods.
3. have opportunity to select foods permitted, restricted, and not permitted.
4. explore ways foods can be made appetizing without use of salt.
5. and finally you will plan a menu for 1 day that meets the requirement of this diet.



Now open your
package --
from me to you.

OBJECTIVES OF UNIT

OVERALL OBJECTIVE

Student will plan a 0.5 Gm. sodium restricted diet for one day.

SUB-OBJECTIVES

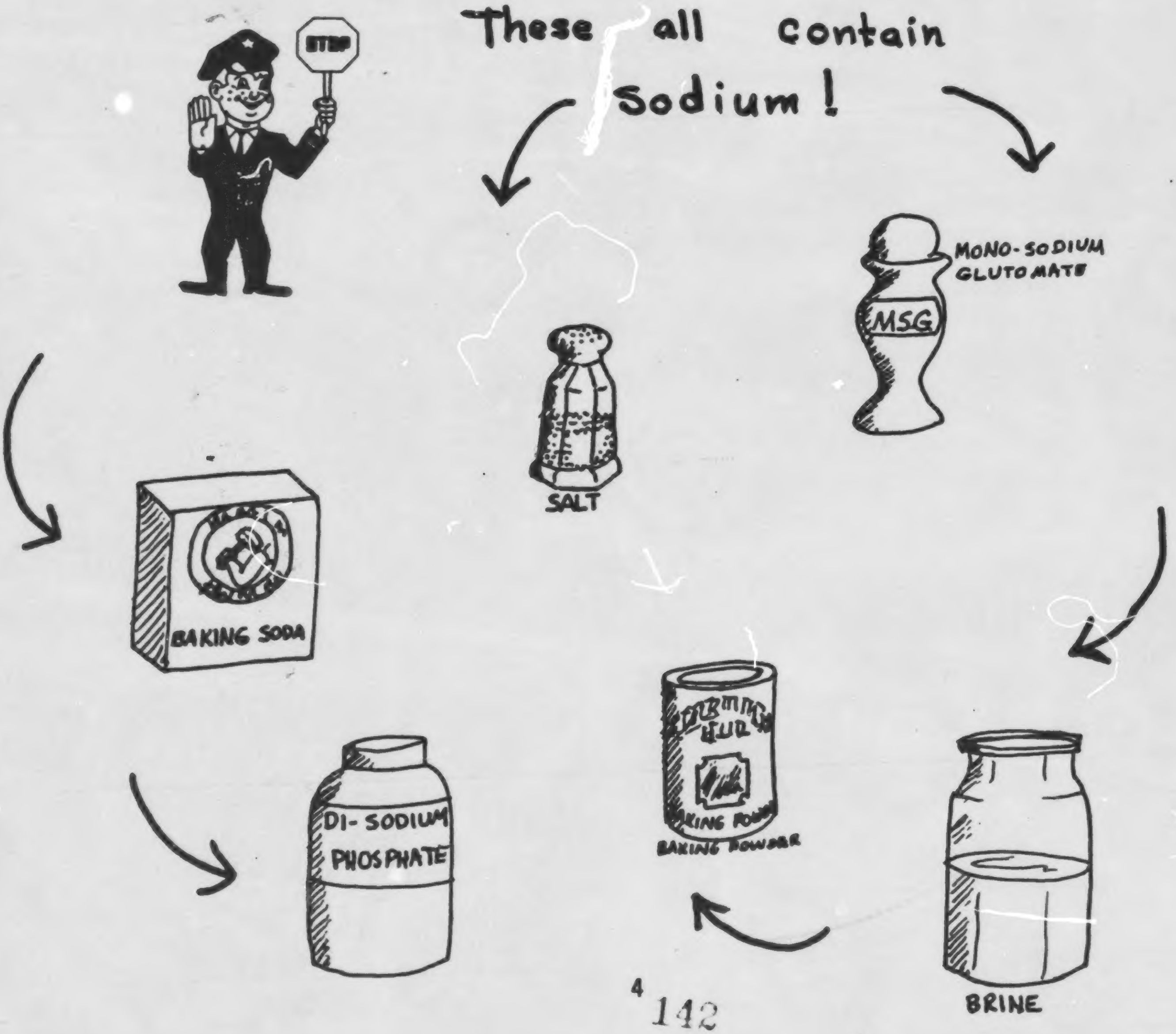
Student will:

1. Given grocery items, identify common sodium additives in foods.
2. Label foods permitted, restricted, and not allowed by color coding with green, yellow, and red felt pens.
3. Write ways foods can be made appealing in absence of salt.
4. Indicate a recipe the student would like to try out at home for himself and family.

   Student will prepare a sodium restricted dish for herself.
5. Write menu for 1 day acceptable on a 0.5 Gm. sodium diet.
6. Identify sodium in a given list of foods and ingredients.

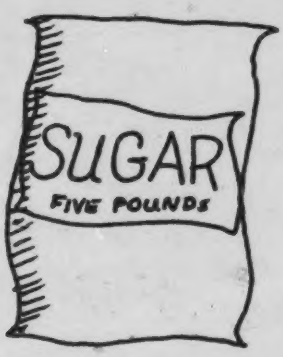
EXERCISE # 1:

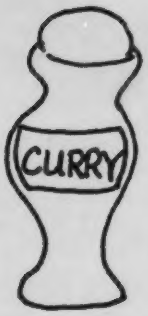
Sodium is an element found in many substances used in foods. A common source of sodium is ordinary table salt. Any food to which table salt has been added contains sodium. When salt is added to water it is known as brine. Baking soda and baking powder are two leavening agents used in cooking which also contain sodium. Canned, specially processed foods, "convenience" foods, and some medicines frequently contain additives made of sodium. Examples of food additives containing sodium are Monosodium Glutamate (called MSG) and Di-sodium phosphate.

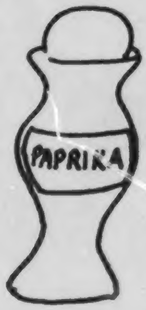

These all contain Sodium!
STOP
MONO-SODIUM GLUTOMATE
MSG
SALT
BAKING SODA
DI-SODIUM PHOSPHATE
BAKING POWDER
BRINE

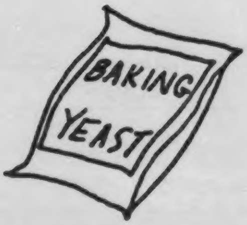
Go! with ingredients like these

(Low or no sodium)


SUGAR
FIVE POUNDS






BAKING
YEAST

Practice Question #1

Which of the following items contain sodium?

1) table salt
2) MSG (Mono-sodium glutamate)
3) Baking soda
4) sugar
5) baking powder
6) paprika
7) curry powder
8) baking yeast
9) brine (solution of salt and water)
10) Di-sodium phosphate

Answer

You're right if you checked the table salt, MSG, baking soda, baking powder, brine and Di-sodium phosphate.

PRACTICE EXERCISE #2

Nearly all foods contain sodium naturally. On the accompanying table note those foods which contain high amounts of sodium in the natural state. ("Foods to Avoid") Note that certain fresh vegetables are to be avoided for this reason. Also because of sodium content, some foods are to be used in limited specified amounts. ("Yellow Zone" - "Caution") Other foods may be used in normal amounts. (Green Zone "Go")

Study Table 1. Then using the table answer the practice question.

Low-sodium diet (500 mg.)

TABLE 1.

GENERAL DESCRIPTION

1. All foods are to be prepared and served without the addition of salt, baking powder, or baking soda.
2. Take only those foods that are tolerated and in the amounts specified.
3. Read all food labels for the addition of salt or sodium in any form.
4. Avoid medications and laxatives unless approved by a physician.
5. The suggested menu pattern for 500 mg. sodium contains approximately 275 gm. carbohydrate, 85 gm. protein, 130 gm. fat, and 2,300 calories. All menu patterns meet the recommended allowances of vitamins and minerals.

	DAILY ALLOWANCE	
Milk	Limit to 2 cups daily - frozen, powdered, or canned or as 1 cup evaporated mile, used as beverage or in cooking; 2 Tbsp. cream (1 Oz.)	Yellow Zone "Caution"
Eggs,	One daily.	
Meat, poultry	Six oz. cooked daily; fresh beef, lamb, liver, pork, veal, rabbit, chicken, duck, goose, quail, turkey, cod, halibut, filet of sole, tuna, salmon, or meats canned without salt, frozen meat containing no salt or sodium. (beef or calf liver allowed not more than once in 2 weeks)	
Cheese	Special dietetic low sodium cheese may be used as a meat substitute as part of the daily allowance.	Green Zone "Go"
Fruit	Three servings daily, including one citrus - ½ cup per serving, fresh, canned, or frozen	
Vegetables	Four servings daily (fresh, frozen, or dietetic canned vegetables only) - ½ cup per serving, asparagus, green beans, wax beans, lima beans, navy beans, broccoli, cauliflower, corn, cucumber, endive, eggplant, lentils, onions, parsnips, peppers, radishes, rutabagas, cabbage, Brussels sprouts, lettuce, mushrooms, okra, soybeans, squash, tomatoes, unsalted tomato juice, turnip greens	
Potato or substitute	Two servings daily of potato, rice, macaroni, spaghetti, noodles, fresh sweet potatoes.	

Red Zone "Danger"

FOODS TO AVOID

Milk	Malted milk, sour cream, buttermilk, condensed milk, milkshakes, chocolate milk, fruit flavored beverage powders, whipped toppings.
Eggs, Meat, poultry	All meat, poultry, fish not listed; meat, fish, or poultry that is smoked, cured, canned, frozen containing salt or sodium, pickled, salted, or dried (bacon, ham, luncheon meats, sausages, salt pork, canned salmon and tuna, sardines), clams, crabs, lobsters, (oysters Eastern), scallops, shrimp, anchovies, salted dried cod, frozen fish filets, commercial meat pies, TV dinners
Cheese	Any others.
Fruit	Dried figs, raisins containing sodium sulfite
Vegetables	Canned vegetables or juices containing salt (V-8 juice), sauerkraut, white turnips, beets, celery, carrots, artichokes, greens-beets, spinach, chard, dandelion, kale, mustard, frozen peas, frozen lima beans, frozen mixed vegetables
Potato or substitute	Potato chips, corn chips

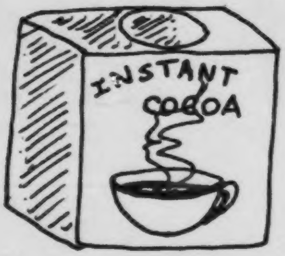
Low-sodium diet (500 mg.) - cont'd.	"GO" Green Zone	"DANGER" Red Zone Foods to Avoid
Cereal	One serving daily shredded wheat, puffed rice, puffed wheat, or cooked cereals that contain no added salt or sodium, such as regular Cream of Wheat, cornmeal, Malt-o-Meal, rice, Wheatena, Pettijohns, Ralston, oatmeal	Quick-cooking Cream-of-Wheat and all other ready-to-eat cereals not listed; self-rising flour
Breads	Low-sodium bread or unsalted matzohs; low-sodium crackers	Potato chips, salted crackers, salted popcorn, pretzels, regular bread, rolls, biscuits, muffins, waffles, commercial mixes
Fats	Sweet butter, lard, salad oil, shortening, low-sodium salad dressing as desired; unsalted margarine (check label and brand)	Salted nuts, salted butter, bacon fat, margarine, salted peanut butter, gravies, and commercial salad dressings
Soup	Homemade soup cooked with allowed meat, vegetables, and milk	Broth, bouillion, consomme, and canned soups
Sweets	Jelly, jam, sugar, honey, gumdrops, marshmallows as desired; small amounts of brown sugar	Any commercial jam and jelly containing a sodium preservative, molasses, candy, candy bar
Desserts	Fruit, gelatin desserts made with plain gelatin and fruit juice, fruit pie made without salt; rice, tapioca, or cornstarch pudding made with low-sodium milk and/or fruit and fruit juices, desserts made with sodium-free baking powder	All others - ice cream, sherbet, desserts made with regular baking powder or baking soda, rennet tablets, pudding mixes; commercial gelatin desserts, pudding and cake mixes.
Beverages	Tea, coffee, Postum, Sanka, cocoa, (except Dutch process) made with low-sodium milk allowance, fruit juice	Instant cocoa mix, prepared beverage mixes.
Condiments	Allspice, bay leaves, caraway seeds, cinnamon, curry powder, garlic, mace, marjoram, mustard powder, nutmeg, paprika, parsley, pimiento, rosemary, sage, sesame seeds, thyme, tumeric, ginger, pepper, vinegar, extracts of almond, lemon, vanilla, peppermint, walnut, maple.	Celery salt, garlic salt, catsup, prepared mustard, salt, meat sauces, meat tenderizers, monosodium glutamate, soy sauce, pickles, relishes, olives, prepared horseradish, Worcestershire sauce, chili sauce, seasoning salts
Miscellaneous		Baking powder. baking soda, chewing tabacco

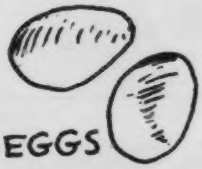
Adapted from an excellent source:
Williams, Sue Rodwell: Essentials of Nutrition and Diet Therapy. The C. V. Mosby Co., St. Louis, 1974, pp. 256-257.

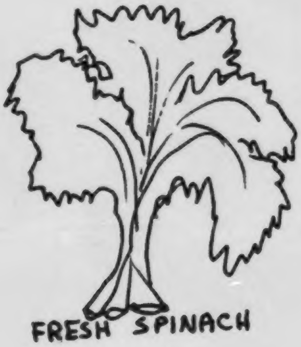
I would recommend this text for further nutritional study.

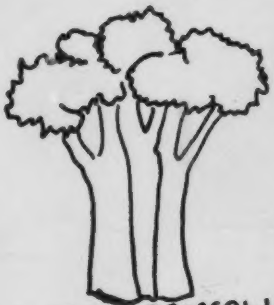
PRACTICE QUESTION #2

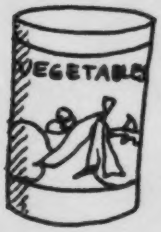
Pictured on this page and next are 20 food items. Circle on the Answer Sheet with green felt pen those items which may be used freely on a 0.5 GM. sodium diet; circle with yellow those which must be limited or restricted, and circle with red those which must not be used.

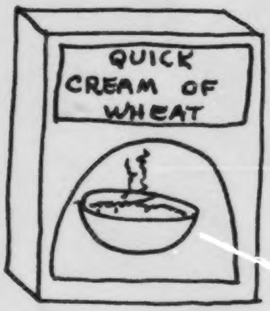

INSTANT COCOA

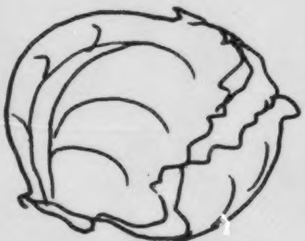


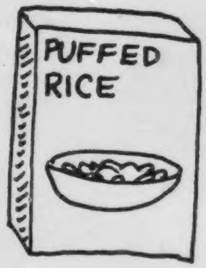

FRESH SPINACH

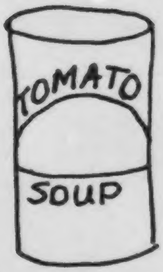

FRESH BROCCOLI

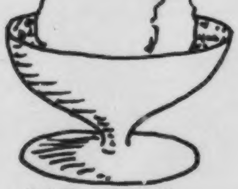

VEGETABLES

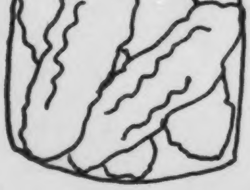

QUICK CREAM OF WHEAT

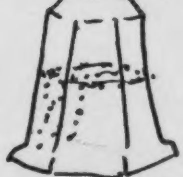

CABBAGE

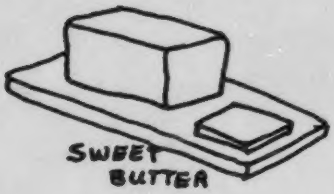

PUFFED RICE


TOMATO SOUP

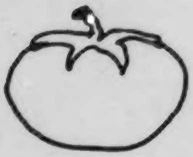

ICE CREAM

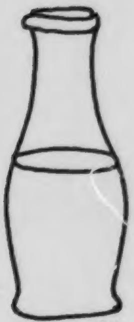

PICKLES


SALT

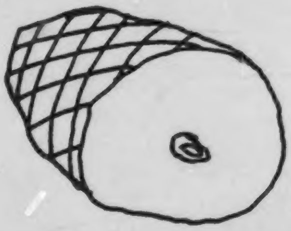


SWEET BUTTER

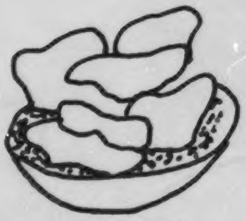




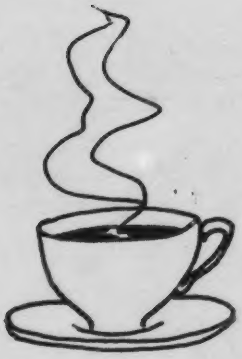
MILK

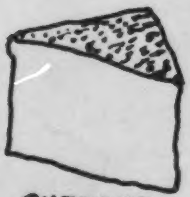


HAM

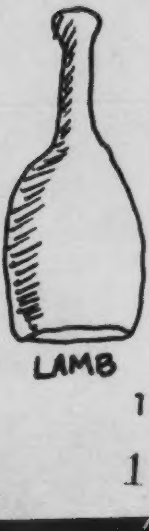


POTATO CHIPS





CHEDDAR CHEESE



LAMB

Answer

Foods which should be:

1. Circled with green
   - cabbage
   - coffee
   - fresh broccoli
   - fresh tomatoes
   - puffed rice
   - sweet butter

2. Circled with yellow -

   - milk
   - lamb
   - eggs

3. Circled with red -

   - cheddar cheese
   - ham
   - potato chips
   - instant cocoa mix
   - fresh spinach
   - canned vegetables
   - quick cooking cream of wheat
   - tomato soup
   - ice cream
   - pickles
   - table salt

PRACTICE EXERCISE #3

A low-sodium diet is very tasteless to many people because of the absence of salt. Low-sodium cooking can become very exciting. The cook may be innovative in the use of acceptable condiments. A condiment is any food that is added to a dish, either during or after preparation, to add flavor. Herbs and spices will give uninteresting foods a new zest. The possibilities are as unlimited as the cook's imagination.

It must be remembered that those condiments containing sodium must not be used, but the "green light" appears over a whole group of acceptable condiments. Refer to the condiment section of Table 1.

For example, rice may be boiled with cloves, peppercorns, and green onions. A curry gravy made with allowed chicken and vegetables could be served over the rice. Cut up green onions, crushed pineapple, diced tomatoes, diced green peppers, and diced cucumber may be served as relishes over the curry.

Another way to serve rice would be as a pudding cooked with cinnamon and sugar and flavored with vanilla. The egg and milk allowance should be used, if needed.

A very tasty way to prepare cabbage is to shred the cabbage finely, butter-steam in unsalted butter with small amount of water and added dill seed or dill weed. Cover and steam 4-5 minutes and serve. This is well liked by those who have had it for the first time.

A beef stew made of beef, potatoes, onions, okra and fresh tomatoes will have added flavor by cooking with bay leaf and peppercorns and perhaps a little garlic.

A mouth-watering omelet can be made with diced green peppers, sliced green onions and paprika.

Potatoes can be seasoned with ground pepper, and sprinkled with chopped fresh parsley or dill weed.

PRACTICE QUESTION #3

By referring to the information on Page 13, match the condiments in Column II to the foods in Column I which they can make tasty and appealing. There may be more than one condiment which can be used for each food. A condiment may be used more than once.

Column I

________________ Steamed rice
________________ potatoes
________________ cabbage
________________ stew
________________ one-egg omelet

Column II

a. bay leaves
b. cinnamon
c. cloves
d curry powder
e. dill seed
f. dill weed
g. garlic
h. green onions
i. green peppers
j. onions
k. nutmeg
l. paprika
m. parsley
n. pepper
o. peppercorns
p. vanilla

Answer

b, d, h, p, o, i	steamed rice
f, m, n	potatoes
e, f, l	cabbage
a, g, o	stew
h, i, l	omelet

PRACTICE EXERCISE #4

Many canned foods, "convenience" foods, packaged foods, some medicines and laxatives contain sodium and would be prohibited on the 0.5 GM sodium diet.

In food purchasing and meal preparation it is vital to recognize the presence of sodium in these foods.

It is necessary to read labels carefully to identify the presence of sodium.

"Dietetic" products may or may not contain sodium. Read labels before using products identified as "dietetic" as well.

PRACTICE QUESTION #4

Remove 3 items from the grocery bag, write name and brand of product, and all ingredients listed on the label which contain sodium.

Answer:

Any of these are correct:

D-Zerta (Lo sodium, Lo calorie) - no sodium present

Evaporated skim milk - Disodium phosphate

Garbanzos - salt
disodium Edta

Hot chocolate mix - sodium saccharin

Jello - sodium citrate

Lima Beans (canned) - salt

Lipton Cup-a-Soup - salt
monosodium glutamate
disodium inorinate
disodium guanylate

Mustard - salt

PRACTICE EXERCISE #5

You have looked at some common food items and seen that they contain sodium. You have seen that sodium occurs in many forms. You have looked at guidelines for choosing the correct foods. Remember the green light says "Go"; the yellow light says "Caution"; the red light says "Stop." Color coding food items has helped you remember some of the restrictions.

Perhaps you have thought "Without salt food will be so tasteless!" But you have been introduced to some ways herbs and spices can not only make food interesting but even exciting. For some of you, it may be like exploring a whole new world!

The following exercises will give you practice in planning menus for the 0.5 GM. sodium diet.

By following the pattern given for the meals, you will be planning a balanced, nutritious diet as well.

In choosing foods think about color, texture, aroma, appearance, "tastiness" and a person's personal preferences.

Can you anticipate your patient's delight over the meal you are about to plan?

PRACTICE QUESTION #5

1) Using Table I as reference, plan a low sodium tossed vegetable salad. Describe foods to be used, how prepared and how the salad will be seasoned.

2) Following the meal pattern for the dinner menu, what changes need to be made in the menu to meet requirements of a 0.5 GM sodium diet? Refer to Table 1.

PATTERN	MENU
3 oz. unsalted meat	3 oz. baked ham
unsalted potato	canned yams
lo-sodium vegetable	buttered spinach
lo-sodium salad	cold artichoke on lettuce with mayonnaise
1 lo-sodium bread	slice whole wheat bread
1 pat unsalted butter	margarine
jelly	grape jelly
1 cup milk	1 cup milk
coffee	coffee
dessert	raisin rice pudding with cream

3) Without using Table 1, see if you can plan a lunch for a 0.5 GM sodium diet using pattern given.

PATTERN	MENU
3 oz. unsalted meat	
unsalted potato	
Lo-sodium vegetable	
Lo-sodium vegetable salad	
1 Lo-sodium bread	
1 pat unsalted butter	
jelly	
1 fruit	
1/2 cup milk	
coffee	

ANSWERS:

1) Tossed salad made with shredded lettuce, sliced mushrooms, diced tomatoes, diced cucumber, cauliflower florettes, seasoned with oregano and pepper; tossed with oil and vinegar. You may have found other combinations.

2) Change ham to unsalted roast pork served with applesauce.

Cook fresh yams instead of canned.

Change spinach to broccoli.

Asparagus spears on lettuce with lemon juice instead of artichoke salad with mayonnaise.

Use Lo sodium bread.

Use sweet (unsalted) butter or margarine.

Jelly must have no sodium additives.

Omit raisins and salt from rice pudding and use milk for pudding from milk allowance.

Coffee and cream (limited) permitted.

3) Check food items used against Table 1.

POST-TEST

I. If the item contains sodium put a check in the "yes" column; if it does not, put a check in the "no" column.

Item	Yes	No
1) table salt		
2) MSG		
3) baking soda		
4) sugar		
5) baking powder		
6) paprika		
7) curry powder		
8) brine		
9) baking yeast		
10) Di-sodium phosphate		

II. Of the following foods, put a check in "green" column if item is permitted on the 0.5 GM. sodium diet; in the "yellow" column if it is to be used with caution in limited amounts; in the "red" column if not allowed.

Food Item	Green	Yellow	Red
1) milk			
2) cheddar cheese			
3) ham			
4) lamb			
5) V-8 juice			
6) potato chips			
7) coffee			
8) instant cocoa mix			
9) eggs			

	Food Item	Green	Yellow	Red
10)	fresh spinach			
11)	fresh broccoli			
12)	fresh tomatoes			
13)	canned vegetables			
14)	quick cooking cream of wheat			
15)	puffed rice			
16)	Campbell's tomato soup			
17)	ice cream			
18)	pickles			
19)	table salt			
20)	sweet butter			

III. In preparing the following foods, select from list seasonings (condiments) which can be used to make the food tasty and appealing. Write them on the Answer Sheet after number for the appropriate foods.

Condiment list

- bay leaves
- cinnamon
- cloves
- curry powder
- dill seed
- dill seed
- garlic
- green onions
- green peppers
- onions
- nutmeg
- paprika
- parsley
- pepper
- peppercorns
- vanilla

1) steamed rice -

2) potato

3) cabbage

4) stew - (containing limited amount of beef, potatoes, onions, okra, fresh tomatoes)

5) a one-egg omelet -

IV. Read labels of items in grocery bag. Write name of item and identify any sodium additives.

	Item	Sodium Additives
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)		

V. Write menu - 0.5 GM sodium diet for 1 day.

(To follow this menu pattern)

Today's Menu

Breakfast

1 fruit ______________________
1 egg ______________________
Low sodium cereal ______________________
1 low sodium bread ______________________
1 unsalted butter ______________________
Jelly (no sodium) ______________________
1/2 cup milk ______________________
coffee ______________________
2 Tbsp. cream (1 oz.) ______________________

Lunch

3 oz. unsalted meat ______________________
unsalted potato ______________________
Lo-sodium vegetable ______________________
Lo-sodium vegetable salad ______________________
1 Lo-sodium bread ______________________
1 pat unsalted butter ______________________
Jelly ______________________
1 fruit ______________________
1/2 cup milk ______________________
coffee ______________________

3 oz. unsalted meat ______________________

Dinner unsalted potato ______________________

lo sodium vegetable ______________________

lo sodium salad ______________________

1 lo sodium bread ______________________

1 pat unsalted butter ______________________

Jelly ______________________

1 cup milk ______________________

coffee ______________________

fruit ______________________

VI Describe a dish you would enjoy preparing for yourself or family in which sodium is restricted.

VII 1) I liked this self instructional unit because ______________________

____

2) This package could be improved by ______________________

____

POST TEST ANSWER KEY

I. Yes - 1, 2, 3, 5, 8, 10 No - 4, 6, 7, 9

II. Green - 7, 11, 12, 15, 20
Yellow - 1, 4, 9
Red - 2, 3, 5, 6, 8, 10, 13, 14, 16, 17, 18, 19

III. 1) curry powder, cloves, peppercorns, onions
cinnamon, nutmeg, vanilla
2) parsley, ground pepper
3) dill weed or dill seed
4) bay leaves, garlic, pepper
5) green peppers, green onions, paprika, pepper

IV Jello - sodium citrate
Mustard - salt
D-Zerta (Lo sodium, Lo calorie) - no sodium present
Lipton Cup-a-Soup - salt, monosodium glutamate, disodium inorinate
disodium guanylate
Garbanzos - salt
disodium Edta
Lima Beans - salt
Evaporated skim milk - disodium phosphate
Hot chocolate mix - sodium saccharin

V. Check items chosen with Table 1 to see if correct.

ERIC Clearinghouse for Junior Colleges
96 Powell Library Building
University of California
Los Angeles, California 90024
JUL 17 1981